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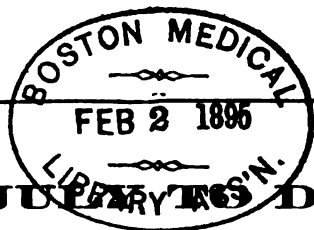
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∴ AND ∴

PHARMACEUTICAL RECORD.

A SEMI-MONTHLY ILLUSTRATED

∴- Journal of Practical Pharmacy. ∴-



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DO not forget the A. P. A. meeting at Asheville. It promises to be a most enjoyable affair.

The druggists of Elwood, Ind., have inaugurated an early closing movement, looking to the closing of stores on Sundays between the hours of 10 and 4 o'clock. It is to be hoped that success will attend their efforts, and that movements of a similar kind will be started in other places. As men engaged in professional occupations pharmacists are entitled to more consideration from the public than they receive in the matter of office hours.

THE labor troubles in Chicago and other points West have greatly interrupted traffic, and many wholesale firms have experienced annoyance owing to the refusal of railway agents here to carry goods to the points of disturbance. The delay in the mail service from the West is responsible for the late appearance of this issue, as we held back for our Chicago letter.

WHILE America cannot lay claim to the doubtful honor of inventing the "trust," she has undoubtedly produced the most gigantic and successful of these mighty engines of commerce. A very interesting discussion of the subject of trusts, based upon a recently-issued history of "Trusts, Pools and Corners," is published elsewhere under that title.

THE General Council of the Society of Chemical Industry of London, England, have acceded to the request of the members resident in and near New York City, and have authorized the formation of a local branch of the society in this city. A meeting will soon be called to proceed with the organization of the local branch. The petition for permission to make the membership fee of the local branch five dollars instead of five shillings, could not be granted, that point being settled by constitutional provision.

OUR STUDENT'S COLUMN

UNDER the heading "Students' Column" we give in this issue a further instalment of the epitome of the organic Materia Medica of the U. S. Pharmacopoeia, which was begun in our issue of May 17.

This article is one of a series to be printed at regular intervals in THE AMERICAN DRUGGIST, which is designed to supply in a convenient form for reference an effective means of memorizing the natural products and preparations of the Pharmacopoeia.

The scope of the work has been enlarged since the publication of the first instalment by a list of *Synonyms* and *Constituents*, this addition being made in compliance with a wish to that

effect expressed by one of the teaching staff of a leading college of pharmacy, who is favorably impressed with the work and believes that when completed it will prove of great value and utility to students as a convenient guide to the Pharmacopoeia.

A POSSIBILITY OF FREE ALCOHOL AT LAST.

FOR years we have strenuously advocated the necessity of providing free alcohol for the arts so as to place the manufacturers of this country on something like an equal footing with foreign manufacturers who have duty-free alcohol with which to carry on their operations. This necessity has at last been recognized by the introduction of the following clause in the internal revenue bill in the Senate:

Any manufacturer finding it necessary to use alcohol in the arts, or in any medicinal or other like compound, may use the same under the regulations to be prescribed by the Secretary of the Treasury, and on satisfying the Collector of Internal Revenue for the district wherein he resides or carries on business that he has complied with such regulations, and has used such alcohol therein, and exhibiting and delivering up the stamps which show that a tax has been paid thereon, shall be entitled to receive from the Treasury of the United States a rebate or repayment of the tax so paid.

The move meets with opposition from the manufacturers of wood alcohol and from some importing houses, but there seems a fair prospect of its eventual adoption.

MEDICINE AND THE FREE LIST.

THERE seems to be at last a probability of final action on the tariff bill, and this prospect is welcomed with an almost universal sigh of relief by the business world. The bill as it now stands is a mass of inconsistencies, but with all its faults it were better to pass it at once (since it is to be passed) so that the commercial world may proceed in formulating plans with some definite information as to the tariff rates as a basis for operation.

In all lines of commerce the importing trade has been carried on in a from hand to mouth fashion for the past year. Instead of purchasing supplies of crude drugs for the entire season, importers have bought only sufficient to last them for a couple of months, fearing that through some possible tariff change they might be put at a disadvantage, should they have larger stocks on hand abroad.

That the bill as it now stands is open to improvement in many directions is admitted even by its warmest supporters, and among the changes which it would seem politic to make are the abolition of duty from several medicinal substances where the duty is almost entirely protective in its nature. On cod-liver oil, for instance, the total revenue last year was less than \$29,000. This, while a mere bagatelle as a matter of revenue, was all paid indirectly by invalids who as a rule could ill afford it. Moreover, the imported oil does not to any great extent come into competition with the domestic oil, the consumption of which is almost entirely local in its character, being confined to those sections where the cod are plentiful. It is the Norwegian oil alone that is used in a large way, and no amount of protection would cause the substitution of the domestic oil for that from Norway, as the question of quality would overweigh that of price.

Sulphur also is an article which might well be placed on the free list, both because the income from the tax is small, and because we have practically no free sulphur mines in the country. The duty on sulphur, it is true, has been of some benefit in directing attention toward the utilization of iron pyrites as a source of sulphuric acid for use in the manufacture of fertilizers, but since the methods employed are of foreign origin, being the invention of Swiss chemists, it will be seen that our own tariff has not played a very important role in the matter.

It is now almost too late to hope for any material changes in the bill, save such as have special interests at work in their favor, but it would certainly seem feasible to make several additions to the free list from schedule "A" without detriment either to the revenue or to the manufacturing interests of this country.

U. S. LIQUOR LICENSES FOR PHARMACISTS.

THE city liquor licenses in Louisville are almost prohibitive, and the

pharmacists there have had hopes of avoiding the additional expense of the United States license on the ground that they could sell liquors on a physician's prescription without rendering themselves liable to classification as liquor dealers. A number of them applied to United States collector of internal revenue JOHNSON as to what construction he would place on the question. The following letter in answer to these queries makes plain the collector's position:

OFFICE OF UNITED STATES COLLECTOR OF
INTERNAL REVENUE.

LOUISVILLE, Ky., June 14, 1895.

R. Kampfmüller, Druggist, Seventh and Broadway,
Louisville, Ky.

DEAR SIR: In reply to your favor of yesterday, I beg leave to say that under Section 3246, Revised Statutes, a druggist is permitted to use spirits and wines, in combination with drugs, in preparing medicines that are not beverages, and to sell such medicines without paying special tax as a liquor dealer. But under the uniform rulings of the Commissioners of Internal Revenue and the decisions of the United States Courts a druggist cannot, without subjecting himself to this special tax, sell spirits or wines that are not combined with drugs or materials of a kind taking these liquors out of the class of beverages, even when he sells liquors on a physician's prescription and for medicinal use only.

As to the compounds called bitters, tonics, and the like, the rule is, if they are composed of spirits in combination with drugs, herbs, roots, etc., and are held out as remedies for diseases stated in labels on the bottles, they are to be regarded as medicines until the facts ascertained as to the purposes for which they are usually sold or used show them to be beverages. But every person who sells such tonics or bitters as beverages, either by the bottler or by the drink, or sells them knowingly to those who buy them for use as beverages, involves himself in liability to criminal prosecution under the Internal Revenue laws, unless he holds a special tax stamp as a liquor dealer.

The fact that a compound may be used as a medicine, and may be so intended by the person making it, does not relieve the seller from the liability of a liquor dealer if the compound is intoxicating and is sold as a beverage.

The true test in all such cases is: Was the compound sold in good faith for medicinal purposes only, or was it sold as a beverage, or sold knowingly to persons who bought it for use as a beverage?

The druggist who sells spirits, vinous or malt liquors, even upon the prescription of a physician, incurs the penalty, unless he has paid the special tax. The addition of quinine, peppin, ginger, or the like, simply to evade the law, will furnish no relief.

Respectfully,

(Signed)

BEN. JOHNSON,
Collector.

The very strict construction placed on the law by the United States authorities is apt to work a hardship in many instances, as the pharmacist seldom sells sufficient alcohol or alcoholic liquids to pay the twenty-five dollar tax.

Collector Johnson's view of the law, however, is rather more liberal than that held by some of the collectors, as it has been held by some of them that the sale of alcoholic tinctures, even for purely medicinal purposes, subjects the pharmacist to the necessity of taking out a U. S. liquor dealer's license. This is an injustice that should be remedied by Congress.

THE GOVERNMENT AND THE INDIVIDUAL.

PRECISELY where the line should be drawn which limits the freedom of action of the individual will by the interposition of governmental regulations, will ever remain a mooted question. The history of civilization shows a continual conflict between a tendency toward centralization of power on the one hand and an effort to preserve personal liberty on the other.

The limitation to be put on the exercise of the individual will, must vary with the environment. In a primitive condition of society the widest latitude is allowed, for strong individualism must be cultivated and encouraged, it being the foundation of the general welfare. On the frontiers of civilization we have reproduced, in a manner, the primitive condition existent in the earlier history of every people. There the individual has at once the largest liberty and the greatest responsibility. If he is improvident he suffers the full penalty of his faults, for there is no organized charity to lighten the evils of his lot.

If he incurs the enmity of his neighbor he must look to his own self-preservation, for there is no police protection extended him.

This large measure of personal liberty therefore carries with it a corresponding degree of personal responsibility, and conversely as the personal responsibility is lessened by the assumption of police and other duties on the part of the State, the personal liberty of the citizen must be abridged. The question always under discussion is: Where, under the special conditions, existent in the particular case under discussion, the line of governmental interference shall be drawn.

In the complex conditions of modern civilization there is evident, even in the most republican forms of government, a tendency on the part of the individual to delegate to the government an increasing proportion of responsibility and concomitant power.

Leaving aside the old blue laws which were the manifestation of an inherited religious intolerance, the history of legislation in the United States during the past fifty years, will show a steady tendency toward centralization of power in the hands of the government, whether State or national. A significant indication of this tendency is shown in the attitude assumed by the national government toward the strike of railway men, which has reached a

head within the week. Never before has the United States Government taken so active a part in affairs of this kind, and the precedent thus set will very likely be carried out even more assertively in the future.

The legal restrictions thrown about the practice of various callings grow every year more exacting, and the callings thus affected become every year more numerous. The regulation of the practice of pharmacy is now accepted as a matter of course. The question of the degree of restriction which shall be imposed is not so generally conceded. In this journal for June 28, on page 358, J. H. REDSECKER proposed the enactment of a law for the regulation of the manufacture and sale of proprietary medicines, which is radical in its departure from any existing precedent in this country.

His proposition is to so amend our national trademark laws as to give no proprietorship in medicines or in medicinal preparations, and by State legislation to require the registration of the formulas of proprietary medicines with the State Board of Pharmacy. To cover the cases of pharmacists making and selling household remedies in a small way, Mr. REDSECKER proposes that the restriction above indicated shall not apply to the preparation and sale of such remedies by registered pharmacists where their sales do not amount more than five hundred dollars annually.

Unless any proposed legislation is clearly for the good of the general public it can scarcely hope to become a law, and more particularly is this true where there are large monetary interests in opposition to it. The question then is whether the good to be accomplished by such enactment is sufficiently great to warrant the encroachment upon what we have come to esteem as individual rights at the present time.

In the light of the foregoing discussion of legislative principles it will be seen that the question of individual rights and individual liberty is largely one of environment; that we are gradually delegating to the Government larger powers in this direction with a consequent curtailment of the individual liberty. Have we now reached the stage when the step advocated by Mr. REDSECKER is advisable? We think not. The tendency is in that direction, but Mr. REDSECKER's suggestion is as yet premature. Public opinion must determine these questions in a general way, and then this opinion will find its expression in legislation. This opinion may be shaped and moulded by agitation and discussion, and the

pioneers are now making efforts which may bear practical fruit later on. The process of education in this direction will be a slow one, for it will be actively combated by manufacturing interests, and even by many unprejudiced and liberal minds; but if the present tendency of thought and legislation continue, governmental supervision of proprietary medicines will surely come about later on.

RE-REGISTRATION.

THE sociologic questions touched upon in the initial paragraphs of the above article come again to the fore in connection with the discussion of re-registration that is now going on in the older States.

At the meetings of both the New York and the New Jersey associations this year much time and thought was bestowed on the discussion of this subject. In New Jersey, for instance, the rolls show a total of registered pharmacists in the State of nearly three thousand, while it is probable that of this number not more than half are now actively engaged in the business. Under the present law, however, there is no means of removing the name of the registered pharmacist from the list when it has once been entered there; "once registered, always registered" is the theory upon which registration is conducted in most of the states.

The practical stimulus which brings about the discussion is a lack of funds on the part of the boards of pharmacy to adequately enforce the provisions of the laws. However much the pharmacist may protest against being compelled to pass an examination and pay a fee before being allowed to conduct a pharmacy, he appreciates highly the somewhat limited degree of protection which is afforded him against competition from unqualified competitors, and is quick to invoke the aid of the pharmacy board where such competitors set up within his domain of trade.

At the meeting of the New York State Association a very vigorous protest was presented from a disgruntled pharmacist at what he considered the laxity of the board in the discharge of what may be called its police duties. It is probable that the New York State Board, and in fact that every State Board of pharmacy accomplishes everything that it is possible to accomplish with the small incomes which these boards can count upon to carry on the police work necessary to the detection and prosecution of offenders

against the pharmacy law. A supply of funds is, therefore, the first requisite toward securing a more rigid enforcement of the pharmacy laws. The point then to be considered, is where these funds shall be derived.

The only reasonable grounds upon which the enactment of any law is that it is conducive to the public welfare. We must assume, therefore, that the protection of the public from incompetents was the *raison d'être* of the pharmacy law. The public, then, should pay for the protection, and not make the body of pharmacists do so. The Government prosecuting officers should see to it that this law as well as any other is enforced.

This conclusion, while a logical, and we contend a correct one, under the premises fails of giving practical relief, for the public has not yet been sufficiently educated as to the benefits conferred upon them by the pharmacy law to be willing to admit the full justice of the conclusion. They will allow the passage of restrictive legislation, but as soon as they are asked for funds to secure its enforcement the cry of special or class legislation is raised, and the pharmacist must either himself bear the burden of its enforcement or must allow the law to become obsolete. While this is unjust it is in the present state of public opinion unavoidable, and as the pharmacist is incidentally benefitted by the enforcement of the law, he must make up his mind to bear the burden of its enforcement.

The funds raised under the present system are inadequate in nearly all the older states, and since it seems that the pharmacist himself must furnish the required funds, the system of re-registration seems the only practical solution of the problem.

Such a step will meet with most bitter opposition on the part of many pharmacists. They will esteem it a great and unnecessary hardship to have to pay a re-registration fee each year, and may, in some cases, esteem it an undue interference with personal liberty.

As shown above, however, the step seems a necessity, since we cannot yet place the charge with the State where it belongs, because the public view the law as one for the protection of a class, and since the proper administration of the law requires larger expenditures.

As to the interference with the liberty of the pharmacist involved, we must consider this also as a part of the price which we must pay for the protection of the pharmacist from unfair competition, and of the public from incompetent pharmacists.

Written for the
American Druggist and Pharmaceutical Record.
**THE PROFESSIONS OF MED-
ICINE AND PHARMACY**
By HARRY B. MASON, PH.G.,
Chester, Mass.

There is an all-pervading idea among the general public that the practitioner of medicine is an allwise being whose knowledge of both medicine and pharmacy is unlimited, and, on the other hand, that the pharmacist is an ignorant vendor of drug sundries who knows, perhaps, what he may have picked up from filling the medical man's prescriptions. They very considerably give him credit for possessing *part* of the physician's great and vast fund, but never for a moment suppose him guilty of knowing anything, no matter how insignificant, that the physician does not.

They exclaim: "It is absurd to suppose that a physician does not know *all* that a pharmacist does!"

What is the origin and cause of these very general ideas that are held concerning pharmacy and medicine?

Before chemistry reached its present high standing as a science the pharmacist was a "druggist," who did little more than buy and sell drugs; he had no right to be considered other than a merchant. But since so much has been done in the field of chemistry during the past few decades, pharmacy has taken great strides forward and sprung from almost oblivion into front ranks as a profession.

Colleges have been organized and each year are growing in number and excellence, where proper training is given the student after he shall have served his four years' apprenticeship in the store. He is there put through a thorough course of study interspersed with practical experiment and turned out a "professional pharmacist." He is a professional man in every respect and capable of being so considered.

State laws have been originated and boards of pharmacy elected to enforce them, compelling pharmacists to be educated for their chosen vocation, and capable of pursuing their calling to the honor of their profession. These have been growing in exactness and severity each year until even recent college graduates find them anything but easy and many fail to pass them.

But after he has been graduated from college and educated and fitted himself as a pharmacist the people think he has but taken part of a medical course—that part which is applicable to pharmacy.

Does the physician endeavor to correct these prevailing ideas, or does he allow the people to consider the pharmacist as possessing but a part of his knowledge? I have yet to find the physician who ever gave the pharmacist his just dues. They are only too willing to build up their own reputations at the expense of the pharmacist.

Let us endeavor to point out a few distinctions between the two sister professions and some of the many duties and requirements of the pharmacist.

The physician diagnoses his patient's case and selects one or more medicines among the list applicable to the result of his diagnosis and prescribes them.

The pharmacist must needs fill the prescription. He must know at a glance whether the articles under consideration in the prescription before him are incompatible or not, whether the chemicals or alkaloids prescribed are completely soluble in the stated solvents, whether any two are therapeutically opposed, and the

character and dose of the non-poisonous as well as poisonous ingredients. If incompatibility is liable to occur he must so dispense the articles as to prevent it if possible; if not, to use his judgment, for in some cases incompatibility is desired. Should the chemicals or alkaloids be insoluble only, or partly soluble in the stated amount of solvents prescribed, he must correct it without materially altering the intent of the prescriber, else an unsightly and mayhap a dangerous compound would result. Should an overdose of a poisonous salt or alkaloid be prescribed, he must distinguish it at once, and correct it if necessary, or, better, seek out the prescriber and courteously call his attention to it. He must not dispense a prescription, two constituents of which are directly opposed in their therapeutic action; atropine and pilocarpine must not be dispensed together, for there certainly would be no desired action and harm might result.

These are some of the things a pharmacist should recognize with one careful perusal of every prescription sent to him to be dispensed.

Every chemical, vegetable drug, alkaloid and preparation used and directed by the physician must be of known purity and excellence. The pharmacist must be capable of thoroughly testing every chemical for its impurities as well as its identification, in fact, he must be an analytical chemist. Adulteration is practiced to such an extent at present that he is compelled to make many of his own salts, and this requires considerable knowledge of operative chemistry. He must be able, if necessary, to identify every alkaloid he has in the store by color tests and reactions, for in cases of emergency, when human life is at stake, too much care cannot be taken. Every drug of vegetable origin he must be able to identify through his trained senses of smell and sight; he must know their adulterants so as to distinguish them readily and thus prevent one thing being dispensed when another is called for. His preparations, to insure accuracy, purity, and excellence, must be made by himself mostly, and this requires much practical together with theoretical knowledge of the drugs and their proper menstrua in order that their valuable constituents may be gotten, to the exclusion of the inert and undesirable ones.

He must have a thorough knowledge of drugs or preparations liable to chemical or fermentative change, and be able to distinguish by tests, sense of smell, taste or otherwise, when such change has occurred, else desired effects are not gotten and harm may result. In fact, every drug, chemical, alkaloid or preparation of any kind under his supervision, must be accurately known by him; their properties, dose, manufacture, origin, solubilities, and peculiarities must be an open book to him.

He is trained and educated for this sort of thing; it is his profession. Does a physician's education and training fit him for this class of work? Is he a professional pharmacist as well as a practitioner of medicine? Our State laws state distinctly that he is not. He must first successfully pass the rigid examinations of the State board before he is allowed to practice. And how many of them are successful unless they have first had many years practical experience in the store, their medical education enabling them to study theory. The number is most decidedly small, so small as to require a powerful lens to make them visible to the naked eye.

There is no law that can prevent a physician from dispensing his own medicines, but since the State laws do not allow him to dispense other than his own, does it speak well for his ability to do so? Ought not this branch of the work to be placed in the hands of the professional pharmacist whose education and training, especially if he be a college man, prepare and fit him for it?

And yet people say: "It is absurd to suppose for an instant that a doctor does not possess all the knowledge a pharmacist has, beside all that a doctor knows." What ignorance! A physician is trained for correct diagnosis of cases and for proper remedies to correct the evils, to perform surgical operations, and many other things of like character, but he is not a pharmacist.

But the idea presents itself: Ought not the physician to precede his medical course with a course in pharmacy? Probably he would be much benefitted thereby; certainly his fund of knowledge would be considerably larger, and since he is supposed to know pharmacy, I am not sure but what it is a commendable step. But no one person is expected to know everything, though I have seen physicians who labored under the delusion that they were masters of several professions, when they were incapable of retaining medicine alone. A small part of a pharmacy course would prove of value to the practicing physician, but the remainder he would never call into account any more than a pharmacist would in taking a medical course. What pharmacy is essential for his use as a physician is included in his college curriculum.

Pharmacy is a complex calling, its phases are many sided and various. The pharmacist must know considerable theory, a great deal more practice, be possessed of an iron-clad memory, and a knowledge of an unlimited number of little things, which in the aggregate amount to much. Among other things he must know the correct Latin name of each of the fifteen hundred articles in his store, and in addition all their synonyms, some of which glory in the possession of half a dozen. To master these details is a question of practical experience of long standing. Any amount of theory will avail naught. And yet, do you tell me that a physician who has but taken a theoretical medical course, and never one minute of practical experience in the store, has ever been trained in these things and is capable of pursuing the profession of pharmacy?

The pharmacist of to-day goes through a college course of considerable severity, a course as exacting, if not more so, than that of medicine. He is fitted for a pharmacist, but nobody ever thinks of exclaiming: "It is absurd to suppose that having been through a college course he is not fitted to practice medicine as well as pharmacy!"

Of course, there are pharmacists who are incapable of pursuing their profession ably, but there are exceptions to every good rule, and you must expect them with this as with any other. I have known physicians who I would not trust to extract a silver from my finger.

In many cases the recovery of the patient is at least partly due to the pharmacist, for without his skill the efforts of the physician would avail him nothing.

But does he get due credit as a professional man and a public benefactor? Let us cite an instance.

A wealthy patient in the country suspects he is diabetically inclined, and sends his city physician a sample of his urine for examination. The physician

takes the urine to a professional pharmacist for examination on suspicion of diabetes mellitus, and in the course of a few days gets his report in full. He then prescribes for and advises his patient according to the results of the analysis made by the pharmacist. Who earns the credit, and who does at least part of it justly belong to? Is it just to suppose that the praise is all due to the physician, think you? He gets it whether or not it is his, and the pharmacist is not known as the means whereby the physician was enabled to correctly treat his patient.

There is hardly a man in existence who is not susceptible to flattery, and if opportunity presents itself whereby he is made to appear a walking compendium of science, he accepts it, whether by so doing he thrusts somebody else back or not. It is to be regretted that physicians are no exceptions to this rule.

I sincerely hope the day is not far distant when the physician and pharmacist will travel their respective paths in peace and harmony, each assisting the other all in his power, but practicing his own profession, thus enabling each to know as they are, and to stand on their respective merits.

Then, and not until then, will the public recognize in the pharmacist a skillful, experienced, educated professional man who is as essential to mankind as is the physician.

Written for the
American Druggist and Pharmaceutical Record.

A PRACTICAL PHARMACIST'S NOTES ON THE NEW PHARMACOPŒIA.

BY FRANK EDEL.

The New Pharmacopœia has now been before the pharmacists of the country long enough for them to become familiar with the changes, additions, and improvements in same, and to form some definite judgment of it.

It was not supposed when it was issued that everybody would be suited; but there can be no doubt that as a body, the profession are pleased with it. It is true that some are disappointed in the work because it did not go as far in the line of standardization of preparations made from vegetable drugs as they would have liked, others (a small body) preferred the 1880 system of parts by weight, and the writer feels safe in asserting that the great majority of working pharmacists of the country were disappointed in not having a system of dosage incorporated therein. In the mind of the writer this was a gross error.

Taken as a whole, the book is a great improvement over the 1880 edition, and there can be no question that it has met with the hearty approval of a great majority of pharmacists in the country. The directions given (very explicit, and often very simple) for testing the purity of chemicals can have but one effect, that of raising the standard of chemicals sold, although it is true beyond question, that the great majority of the profession do nothing in this line, and even when they do anything at all, do so little as to make it worth nothing to them. To illustrate: Some time ago, the writer had a sample of glycerin C. P., from a well known manufacturer, handed him to test.

The gentleman who handed it said it was heavy with sugar or glucose, that it turned very brown when mixed with con-

centrated sulphuric acid, and that the Pharmacopœia said that it indicated these impurities. Upon being questioned, he said he did not especially test for either of them except as above.

A careful examination of the sample showed neither glucose, sugar nor gum. This is merely given to show how conclusions can be formed very hastily and thus be very misleading. If the pharmacist will use the test given in the Pharmacopœia he will soon become so familiar with the detail work of pharmaceutical testing that he, unknown to himself it may be, will have laid the foundation work for a knowledge of chemical principles and reactions which cannot but be of great advantage to him.

But it was not the writer's purpose to enter into a discussion of any particular part of the Pharmacopœia, but rather to notice the changes, call attention to what seem to him as improvements or otherwise, and not to dwell at any length on any particular subject.

The change from cotton to precipitated phosphate of lime in making medicated waters was opportune; few pharmacists were pleased with cotton, and phosphate of lime is greatly superior to it from any standpoint, and also superior to the carbonate of magnesium used in the 1870 formulas. But distillation is vastly to be preferred to either.

In leaving abstracts out the committee did a wise thing. In their endeavor to uniformity the committee of 1880 incorporated abstracts. But they have met with little use, and while they are more uniform than the solid extracts they are too bulky and have every other disadvantage of the extract. The Pharmacopœia recognizes but the 10 per cent. hydrobromic acid. Would it not have been well to have incorporated the 84 per cent. also? This acid has been pushed for years, has considerable sale, and the writer believes it should have had a place among the U. S. P. acid.

Stearic acid is a new official incorporated simply for its use in making glycerin suppositories. Sulphurous acid has been changed back to the 1870 standard of straight 6.5 per cent. The 1880 acid is too dilute, containing but 3.5 per cent. This has been frequently pointed out by Dr. Squibb, who in his price list has refused to list a U. S. P. 1880 acid, but has continued to list the acid of 1870.

The U. S. P. ether of 1890, is the ether fortior of 1880. This is as it should be, for the best is none too good for the Pharmacopœia.

Hydrogen peroxide has been made official, and a formula for its preparation given. The use of this preparation has grown enormously during the last few years. And there are some very competent and skillful pharmacists and chemists who claim that it is not stable, but rapidly loses strength. By the formula now official this is no objection, as it can be easily prepared by the pharmacist at short intervals.

The change from parts by weight to liquids by measure and solids by weight was made in accordance with the wishes of a large majority of the working pharmacists.

The formula for cerate of cantharides has been modified by the addition of turpentine. This was done because of the solvent action of turpentine on cantharidin.

It does not appear that styptic collodion is an efficient medicinal; it certainly is not a good pharmaceutical.

Since it has been fully demonstrated

that water is a solvent for the active principles of ergot, it may be questioned whether the increase in the alcoholic strength of menstruum used in the formula for fluid extract is wise or not. Acetic acid is, to say the least, of questionable value in this formula.

The alcoholic strength of fluid extract grindelia has been increased. This preparation is now largely used in rhus poisoning, and there can be no question that the alkaline preparation as made by at least two prominent pharmaceutical houses is more efficacious in such cases than the resinous fluid extract made by the U. S. P. formula.

The directions for making fluid extract of triticum repens are the same as in 1880 Pharmacopœia. It is an impossibility under ordinary conditions to exhaust this drug by percolation with hot water without fermentation of the saccharine matter. The drug is, however, easily exhausted by boiling, and by this means a much superior extract can be made without any danger from the source.

The formula for standardized extract of nux vomica is welcomed by all, as it offers at last a sensible means of making a standardized tincture of nux vomica.

The formula for glycerite of hydrastis is an excellent one. There can be no question that the non-alcoholic preparations of hydrastis are more largely sold than others, and the incorporation of the formula into the Pharmacopœia can but bring about greater uniformity in preparations of the kind. It also gives the pharmacist a ready means of preparing an elegant preparation of this kind.

The standardization of the preparations of opium is a step which has long been regarded as a necessity, and the increase of morphine strength required in powdered opium is also wise. Any person who has taken occasion to examine the powdered opium from reputable houses cannot have failed to note that very rarely, if ever, does it run as low as 12 per cent. The method of assay has been changed to conform to the views of Squibb and others.

Green iodide of mercury (proto iodide), made by the process of 1880 and before, has not been a satisfactory chemical, while by the 1890 formula it is easy to prepare a proto-iodide of mercury that is free from mercuric salts.

The formula for liquor potassæ arsenitis has been changed by doubling the amount of bicarbonate potassium formerly ordered. This conforms with the idea of Prof. Oldberg, and the arsenical solution is much more rapidly completed than by the old formula.

Liquor Ferri et Ammoniac Acetatis is the new title for Basham's mixture, and glycerin is ordered in place of the syrup of the old formula.

It is to be regretted that the recommendations of Prof. Patch in regard to liquor magnesia citratis were not followed. The product of the formula of 1880 was unstable, and it is very questionable whether the 90 formula will keep as well.

The Pharmacopœia of 1880 allowed the use of heat up to 160° F., in making oleate of mercury. The new Pharmacopœia orders it made cold. This may and no doubt does improve its keeping qualities some, yet still it keeps poorly. It has always appeared to the writer that the 28 per cent. oleate should be the U. S. P. preparation instead of a solution of oxide in excess of oleic acid, as now ordered. The 28 per cent. is just as easily made and keeps much better.

The Pharmacopœia, in accepting 1 to 3,000 as the digestive strength of pepsin,

is only keeping pace with the advancement in pepsin manufacture.

The formula for spirit of nitrous ether has been changed to conform to the investigations of Prof. Patch.* Since the great majority of pharmacists use the concentrated nitrous ether of the market, they are chiefly interested in the mode of assay given.

When the Committee of 1880 changed the oil of nutmegs in aromatic spirit of ammonia, and ordered in its place oil of pimento, they made a mistake which the Committee of 1890 recognized and corrected by changing back again to oil of nutmegs. The spiritus odoratus of the last Pharmacopoeia and also of the new does not seem to have given satisfaction, but it is little used, since every pharmacist has a special formula of his own.

The spirit of phosphorus will be found rather difficult of preparation. If the phosphorus is first dissolved in a small quantity of chloroform, and the proper amount of alcohol added, solution can easily be effected.

The formula for syrup of hydriodic acid has been changed and now conforms with the N. F. formula.

The formula for syrup of lactophosphate of lime has been changed to conform to the idea and formula suggested by Rother some years ago. Both of the above preparations are more easily made by the present formula than by those formerly official.

The citric acid of the compound syrup of the hypophosphites has been replaced by hypophosphorus acid.

In compound syrup of hypophosphites, with iron, advantage is taken of the solubility of lactate of iron in citrate of potassium solution. As hypophosphite of iron is also soluble in citrate of potassium solution, would it not be preferable to use this in place of the lactate?

Acetic acid has been added to the formula for syrup of ipecac. The formula for compound syrup of sarsaparilla has been greatly changed, whether wisely or not time will tell.

The formula for making compound syrup of squills is also modified.

The menstrum used in making tincture of aconite root has been changed, being made less strongly alcoholic so as to make a preparation insoluble with water without precipitation.

Tincture of arnica root is continued, although for what purpose is not known.

Tincture of calendula is still ordered made from the flowering herb instead of the flowers. Since all the reputation the preparation has was made by a tincture of the flowers it seems strange that the committee should order the flavoring herb instead of the flower itself.

Tincture of strophanthus is made official.

The formula for cold cream has been modified and borax added to it.

The changes called to mind above are the most important, and, taken as a whole, the writer would offer it as his individual opinion that the pharmacists of America have just cause to be proud of the United States Pharmacopoeia of 1890.

DEPILATORY SOAP.

[JACOB MELLINGER.—*Corps Gras Industrie.*]

	Parts.
Glycerin.....	453
Tallow.....	907
Cocanut oil.....	907
Castor oil.....	1,844
Soda lye 33 per cent.....	1,814
Starch.....	173
Sodium sulphate.....	907

* See AMERICAN DRUGGIST for March 1893 page 17.

Pharmaceutical Progress.

Tetano-antitoxine is an animal extract designed to counterbalance the poisons of tetanus; hence its name. It is brought out by Fizzoni and Caltani.

Juglandine is a resinous extractive from the secondary cortex of the root of *Juglans cinerea*, and is employed as a laxative, in doses of 2 to 3 grains, and as a strong purgative in doses of 15 to 30 grains.

Koussotoxine is the principle isolated from koussou, having the composition $C_{22}H_{21}O_5$. It is a yellow powder, melting at 80° C. It is easily soluble in alcohol, ether, and chloroform, and insoluble in water. It closely resembles the koussine of Merck ($C_{22}H_{21}O_5$), but it reduces Fehling's solution, which koussine does not.

Embelic acid, an acid obtained from the roots of *Embelia ribes*, one of the East Indian *Myrtaceae*, is being put forward as an ammonium salt as a remedy for tape worms. The composition of the salt is $C_8H_7O_5.NH_4$. Being very insoluble, it is best administered in suspension in syrup or honey, and should be taken in doses of 3 to 6 grains, after a dose of castor oil. It is a ténifuge and not a purgative.

Codeine Alkaloid in the Salts.—The *Rundschau für Pharmacie* gives the following note on Salts of Codeine:

Phosphate of codeine contains 76 per cent. of codeine; it is soluble in 4 parts of water, and is the best for hypodermic injections. Hydrochlorate contains 8 per cent. of base, and is soluble in 20 parts of cold water and one part of hot water. The sulphate contains 76 per cent., and dissolves in 35 to 40 parts of cold water.

New Reagent for Glucose.—M. J. Gaube proposes the following, which he declares will show the presence of infinitesimal quantities of glucose: Potassium ferricyanide, K_3FeCy_6 , chemically pure, 1 part, soda lye (soap makers' lye) 20 parts; distilled water, 2,000 parts. Mix and dissolve. Fifteen deci-milligrams (0.00015) of glucose exactly decolorize 1 gm. of this solution.—*Nat. Drug.*

Reagent for the Nitrites.—O. Bujwid, in the *Chemiker Zeitung*, states that the following reagent is very delicate, demonstrating the presence of the merest traces of the nitrites in water analysis. Add a few drops of chemically pure hydrochloric acid to 10 ccm. of the water, warm to 70° or 80° C, and add a few drops of indol solution (0.1—0.2 indol in very dilute alcohol) to the mixture. If trace of the nitrites be present, a fine red color at once develops, which becomes stronger for several minutes.—*Nat. Drug.*

The Alkaloids of Corydalis Cava.—The root of the corydalis contains several bases. Treated with alcohol it yields:

Corydaline in the form of large white prisms, fairly soluble in alcohol and ether. Another feeble base accompanies the foregoing, and crystallizes in white needles which melt and decompose at 218°. This substance, soluble with difficulty in ether and ether and alcohol, dissolves in strong acetic and hydrochloric acid, not in alkalies.

Bulbocapnine, according to Freund and Josephy is a strong base, melting at 199° and soluble in an excess of alkali. It is a constituent of the alcoholic extract. The hydrochlorate is sparingly soluble in cold water.

Corydine is amorphous, insoluble in water, very soluble in alcohol and ether. It is derived from the mother-liquids which

yield the bulbocapnine. The neutral uncrystallizable hydrochlorate is soluble in water. Soda precipitates it as a white mass insoluble in an excess of reagent. It is a violent tetanic poison.

Emulsin is the name of a paraffin oil which has been placed on the market in France, which has been oxidized under pressure. It is (*Jour. d. Pharm. v. Els. Loth.*, 1894, 128) a neutral odorless liquid, forming a permanent milky mixture with water, and is recommended for the preparation of emulsions. The editor of *Centralhalle* points out that this description fits vasogen [see A. D. & P. R. for 1894, p. 316], while the introducer shows but a scanty knowledge of chemistry, as the name emulsin has already been applied to the ferment of the almond.

Antiphtisine or Sozalbumose Figures Chiefly Among New Remedies This Month.—According to the *Pharm. Centralh.* it is prepared as follows: A ½ per cent. solution of cresol is added to a culture of bacillus tuberculosis and filtered. After 24 hours the culture is perfectly sterile. Excess of iodide of bismuth and sodium solution is now added in order to precipitate the toxalbumens. The sozalbumose remains in solution. If this be now warmed with a little caustic soda solution and filtered all the bismuth is removed. By the addition of five volumes of alcohol the antiphtisine is precipitated. It is then redissolved and preserved in water containing .2 per cent. of cresol.—*British and Colonial Druggist.*

Spasmotoxine, or sphacelotoxine, is a substance extracted from ergot, whose chief action is to produce muscular contraction of the small arteries, and an action on the uterus similar to that of ergot itself. It has been isolated by Dr. Jacoby, of Strasburg. Its preparation is based upon its solubility in ether and its insolubility in petroleum ether. The ergot is first extracted with ether, and the compound precipitated by means of petroleum ether and then purified. It forms an amorphous yellow powder, insoluble in water or dilute acids, but very soluble in alcohol, acetic ether and benzol. It forms salts with alkalies, and is obtained in the crystalline state by means of benzol. Its formula appears to be $C_{22}H_{21}O_5$. The ordinary dose is from ½ to 1 grain.

Chroatol.—A new remedy in skin diseases. Chroatol presents itself in the shape of crystals of greenish-yellow appearance, having a pronounced aromatic odor, insoluble in water, slightly soluble in ether and chloroform, but more so in alcohol and glycerin. Experiments instituted on guinea pigs show that it can be taken up to 75 cgm. per kilogramme of weight (6 grains to the pound) without producing any poisonous effects. In clinical medicine, applied to the skin suspended in collodion in a case of refractory psoriasis, upon which all of the most powerful remedies hitherto known (pyrogallie acid, chrysophanic acid) had failed, it produced rapid amelioration, and finally a cure. It has been used successfully in a certain number of cases of alopecia and porrigo decalvans. In a pomade and in powder (diluted with inert matter 10.1) it has proven successful in the treatment of rebellious varicose ulcers. A curious fact in regard to chroatol thus administered is, that many patients upon whom it had been used complained of a bitter taste in the mouth and throat. This is due, no doubt, to the elimination of the remedy by the respiratory viæ.—*The National Druggist.*

Extracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.*

(Continued from page 340.)

Preparations for Cleansing Clothing.

OX-GALLS CLEANSING SOAP.

I.

	Parts by weight.
Extract of soap bark.....	5
Borax, powdered.....	5
Fresh ox-gall.....	20
Common soap in coarse powder.....	75

Triturate together the borax, extract of soap bark, and ox-gall, dissolving as much of the borax as possible. Then add the soap, beat the whole to a uniform consistency, and cut into cakes of the desired size.

II.

	Parts by weight.
Borax, powdered.....	10
Common soap.....	70
Green soap (soft).....	20

Mix to a uniform mass, using a gentle heat if necessary.

CLEANSING PENCILS.

Form little rolls from either of the above soaps 2 c.m. (half an inch) thick and 5 c.m. (2½ inches) long, and cover with tin foil.

CLEANSING SOLUTION.

Fleckwässer.

I.

	Parts.	
Spirit of ammonia.....	50	5 fl. ozs
Rectified turpentine.....	50	5 fl. ozs
Ether.....	50	5 fl. ozs
Oil of lavender.....	5	¼ fl. ozs
Alcohol (90 per cent).....	845	34½ fl. ozs

Mix and filter.

II.

	Parts.	
Spirit of ammonia.....	20	2 fl. ozs
Ether.....	50	5 fl. ozs
Benzine.....	150	15 fl. ozs
Oil of lavender.....	5	¼ fl. ozs
Tincture of soap bark.....	225	22½ fl. ozs
Alcohol (90 per cent).....	500	50 fl. ozs

Mix and filter.

III.

	Parts.	
Rectified turpentine.....	10	1 fl. oz
Benzine.....	10	1 fl. oz
Ammonia water.....	10	1 fl. oz
Alcohol (90 per cent).....	70	7 fl. ozs

IV.

	Parts.	
Benzine.....	999.0	
Oil of turpentine.....	0.5	
Oil of myrbane.....	0.5	

Mix.—The so called "Brönnersche Fleckwässer" is particularly suited for cleansing gloves.

Before applying any of the cleansers recommended to colored goods an experiment should be made either with a sample of the goods or on some portion which will not be seen, to determine whether directions given for treating the spot will not affect the color.

[The following directions are extracts from a table compiled by Ad. Vamacka and published entire in Dielench's manual.]

THE SPOT IS OF UNKNOWN ORIGIN.

White goods: Dissolve some soap in lukewarm water and add two dessert spoonfuls of cleansing liquid (as above), and dampen the spot with a sponge soaked in this solution; finally wash out in clear water.

Colored Woolens: Dissolve a cleansing

pencil (as above) in a bottle of solution and wash out the spot in the liquid, then rinse in clear water and dry in the air.

Silk, satin and similar delicate fabrics: Add to above solution the yolks of two eggs, and spread this on the spot. Then wash in lukewarm water, rinse in cold water and dry by a gentle heat. To press out use an iron that is warm only, not hot.

THE SPOT IS OF DUST.

White goods: Beat and brush.

Colored wool, silk, satin, etc.: Old spots that are dried in should be painted first with yolk of egg, then with cleansing solution and allowed to dry. Scratch this off and wipe with a wet linen rag.

MILK, SOUP, OR SMALL GREASE SPOTS GENERALLY.

White goods: Wash with the warm solution of a "cleansing pencil" in water.

Colored cotton or woolen goods: Dampen with cleansing solution; remove the excess of the solution by means of blotting paper, and wash with a solution of a "cleansing pencil."

Silk, satin, etc.: Dampen by means of a sponge soaked in cleansing fluid No. 1, removing any excess by means of blotting paper.

BUTTER, GREASE, OIL, OIL PAINTS, VARNISH, ETC.

White or colored woollens or cotton goods: Moisten several times with cleansing fluid No. 1, lay a piece of blotting paper over the spot and press this with a hot iron. Then wash the whole of the fabric in hot soap suds.

Silk, satin, and delicate fabrics: Rub up some "white bole" thin dough with cleansing solution No. II., and spread over the spot. When thoroughly dry brush off and wipe with dry bread crumbs.

When the spots are old: First moisten with chloroform and then proceed as above.

THIS SPOT IS FROM STAINED WAX, ETC.

First remove as much as possible with a knife, then lay a damp towel under the spot and put several thicknesses of blotting paper over it and press out with a hot iron. If any stain remain after this, treat as directed under butter, grease, etc.

RESIN, TAR, AXLE GREASE, ETC.

White goods: Wet with good oil of turpentine, wring out, cover with blotting paper and go over with a hot iron. Then wash in warm soap suds.

Colored cotton or woolen goods: Moisten the spot, apply butter, soap thoroughly, allow to stand for a few minutes and then wash with oil of turpentine and hot water alternately. If this does not help, spread over the spot the yolk of an egg previously mixed with turpentine, cover with blotting paper and press with a hot iron. Then scratch off the residue and wash thoroughly. As a final resort wash out in water slightly acidulated with hydrochloric acid.

Silk, satin, etc.: Drench with chloroform, and when this has evaporated apply "white bole," cover with blotting paper, and press with hot iron. If this does not help, mix some yolk of egg with chloroform and proceed as above, removing the residue by wiping off with bread crumbs.

VINEGAR, ACID WINES, FRUIT, ETC.

White goods: Wash out with clear water to which a little "cleansing solution" No. II. has been added.

Colored goods whether of cotton, wool, or silk: Moisten with "cleansing solution," allow to evaporate, and then rinse in clear water.

ACIDS.

Fresh spots may be removed by putting on a drop of "cleansing solution;" old spots cannot be remedied.

COLORS FRUIT STAINS FROM PEACHES, RED WINE, CHERRIES, STRAWBERRIES, ETC.

White goods: Dip in Javelle water and immediately that the stain has disappeared wash thoroughly in clear water.

Colored cotton or woolen goods: Wash with hot soap suds, to which a smaller or larger quantity of Javelle water has been added (as the fabric is more or less delicate), rinse in water to which a little cleansing solution has been added; finally wash in a large quantity of clear water.

Silk, satin, etc.: Follow directions as above, save to use very dilute solutions.

GRASS STAINS.

White goods: Wash out with boiling water.

Colored goods, whether of cotton, wool, or silk: Moisten the spot with a very dilute solution of chloride, and then wash thoroughly in a plentiful supply of clear water.

STAINS FROM TANNIN, GREEN, NUTS, ETC.

Treat with very dilute Javelle water.

COFFEE OR CHOCOLATE STAINS.

Cover the spot with yolk of egg diluted with "cleansing solution," wash out in warm water and iron while still moist on the wrong side of the cloth.

ANILINE INK STAINS.

White goods: Wash with alcohol to which a little acetic acid has been added, and then bleach with Javelle water.

Colored goods, whether cotton, wool or silk: If the color admits of it follow the directions for white goods. If the dye is too delicate for this, wash out with strong alcohol alone, as nothing else will prove of benefit.

Toilet Applications.

COCOA-BUTTER MILK.

Powdered borax.....	3 iiss
Powdered Castile soap.....	3 iv
Powdered cocoa butter.....	5 iss
Cocoonut oil.....	3 iv
Water.....	3 ij

Rub together in a warm mortar for ten minutes, then dilute very gradually with—

Rose water, at 40° C.....	3 xxvj
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Shake the mixture well and perfume with—

Oil of bergamot.....	gtt. xx
Oil of neroli.....	gtt. v
Oil of orris.....	gtt. j
Vanilla sugar.....	3 iiss

Previously rubbed together.

COCOA MILK.

Powdered borax.....	3 iiss
Powdered Castile soap.....	3 v
Cocoonut oil.....	3 ij 3 ij
Water.....	3 ij
Rose-water 40° C.....	3 xxvj
Oil of bergamot.....	gtt. x
Oil of neroli.....	gtt. v
Oil of wintergreen.....	gtt. ij
Oil of ylang-ylang.....	gtt. j
Oil of bitter almonds.....	gtt. j

Prepare in the same manner as cocoa-butter milk.

LANOLIN MILK.

Powdered borax.....	3 iiss
Powdered Castile soap.....	3 v
Water.....	3 iiss
Cocoonut oil.....	3 j
Lanolin.....	3 iiss
Rose-water at 40° C.....	3 xxvj
Oil of bergamot.....	gtt. x
Oil of neroli.....	gtt. v
Oil of rose.....	gtt. v
Oil of wintergreen.....	gtt. j
Oil of orris.....	gtt. j

Prepare in the same manner as cocoa-butter milk

* Translated from the AMERICAN DRUGGIST AND PHARMACEUTICAL MANUAL.

Notes on Practical Pharmacy.*

By JOSEPH W. ENGLAND, PH.G.

"C. C." COUGH MIXTURE.

Under this name a cough mixture is very largely used in the phthisical wards of the Philadelphia Hospital. It has, in each fluid drachm, the following: Co. leine sulphate, one-eighth grain; diluted hydrocyanic acid, two minims; spirit of chloroform and mucilage of acacia, each fifteen minims, and syrup of wild cherry, a sufficient quantity to make one fluid drachm. Dose, one fluid drachm.

DISTILLED EXTRACT OF WITCH HAZEL.

The writer has been informed, on good authority, that the percentage of alcohol in commercial distilled extract of witch hazel is not necessarily an index of its value, for the reason that some dealers buy the cheaper aqueous distillate from the distiller and add alcohol. The only proper product is had by distilling the fresh twigs with a mixture of alcohol and water, whereby a greater quantity of volatile oil is brought into solution than by distillation with water alone.

SYRUP OF WILD CHERRY.

In making this syrup, more especially in the summer season, when fermentation takes place readily, it is advisable to add some of the sugar to the percolate as soon as possible to prevent change. The pharmacopoeial formula of 1870 contained no glycerin, that of 1880 ordered five per cent., and that of 1890 fifteen per cent. by volume. This last increase seems excessive. The greater the percentage of glycerin the greater the amount of tannin extracted, up to a certain point. It is a question whether this increased astringency in the syrup is therapeutically desirable.

BLAUD'S PILLS (IMPROVED).

The usual formula for this much-used, unofficial ferruginous preparation of ferrous sulphate, potassium carbonate, tragacanth and glycerin, can be much simplified and made to yield a more permanent product by using the following formula: Potassium carbonate, one-third grain; potassium sulphate, two grains, and mass of iron carbonate, three grains in each pill. Little or no excipient is required. The pills flatten somewhat on keeping, and are best dispensed in gelatin capsules. They are small in size and do not become hard and reddish-brown on fracture as do those made by the old formula.

ointment of AMMONIATED MERCURY.

This ointment is most difficult to make by the official process and secure entire freedom from "grit." The best method is, for example, to finely powder in a mortar 48 grains of the mercury compound and beat it into a smooth paste with 12 grains of glycerin, and make the official ointment from this as wanted, by admixing one drachm with seven drachms of cerate. In this connection criticism may be made against the use of alcohol, as in the 1880 Revision, or olive oil, as in the 1890 Revision, to render veratrine smooth in making veratrine ointment. A small quantity of glycerin is better. Glycerin is also of superior utility in softening extract of belladonna prior to making it into ointment; the Pharmacopoeia specifies diluted alcohol.

MUCILAGE OF SASSAFRAS PITH

This mucilage is best made by beating the pith, in a wedgewood or porcelain

mortar, with a small quantity of sterilized water until it gets pasty, expressing through cheese-cloth, returning residue to mortar, adding more of the water and continuing as before. In this way, in a short time, a dense and syrup-like mucilage may be had, very different in physical appearance from the watery product gotten by following the official directions of simple maceration in water for three hours and straining.

As this preparation is used as an emollient in inflammatory conditions of the eye-ball and mucous membranes, it is obvious that the greater the percentage of mucilage in solution, the more soothing it will be. In these days of asepsis, the use of water in making the official mucilage is an unpardonable sin in the eyes of oculists. Sterilized water, i. e., water or distilled water boiled and cooled, only should be employed. Three hours' time in making the preparation is far too long, when it can be better done in a few minutes.

HOPE'S CAMPHOR MIXTURE.

This old preparation has been gradually increasing in use, and is recognized by the National Formulary under the name of *Mistura Camphora Acida*, which authority follows the formula of Ellis (Griffith's Formulary, 1886, p. 160) in using nitric acid. The original formula of Hope, however, specified nitrous acid. The formula we have used for years is: Fuming nitrous acid, 2 fluid drachms; tincture of opium, 80 minims, and camphor water, 1 pint. Parrieh's Pharmacy (1884) refers to the mixture as follows:

This formula was originally made public after twenty-six years' experience of its use in dysentery, by Thos. Hope, Esq., surgeon, Chatham, in the Edinburgh Medical and Surgical Journal, January, 1824. Dr Hope was in the habit of directing *nitrous acid*, not nitric, which he says he has "not found to produce any good effect." I have been careful to follow his formula literally, and have for the purpose prepared nitrous acid by the process given on p. 500; though nitrous acid passes into nitric acid by contact with water, this reaction does not occur in the presence of an excess of nitric acid. Few remedies have a more general and widespread reputation than this; it is now frequently prescribed, more than eighty years after its virtues were originally discovered.

The nitrous acid used is known in commerce as fuming nitrous acid or fuming nitric acid. It is really nitric acid, holding in solution nitrous acid fumes, which latter may be wholly removed by boiling, or largely by simple and continued exposure to air; so that the commercial product varies considerably in strength of absolute nitrous acid.

Remington's Pharmacy (1885), p. 1027, specifies nitrous acid in the formula for this mixture, as does also the National Dispensatory of 1884 (p. 75) and 1894 (p. 76). Hope's Camphor Mixture is still largely used, at least with us, in summer dysenteries, and if Mr. Hope's contention as to the necessity of using only nitrous acid, never nitric is correct, then the National Formulary decidedly errs in following the formula of Ellis and specifying the latter.

The objection sometimes raised as to the difficulty of securing good fuming nitrous acid can be met. The pharmacist can easily make his own nitrous acid, extemporaneously, from sodium nitrite and nitric acid, using quantities sufficient to yield the amount of acid in the formula, which is small. Messrs. Rosengarten & Sons state that sodium nitrite of the new official strength (97.6 per cent.) is readily obtainable.

MEDICATED WATERS.

In the making of medicated waters—save those prepared by distillation or direct solution—the new Pharmacopoeia directs precipitated calcium phosphate as the distributing medium in about the

same proportion as that directed for magnesium carbonate in the 1870 issue. As was pointed out by the writer ten years ago (A. J. P., 1884, p. 65), in advocating the use of precipitated calcium phosphate for this purpose, it is essential in order to properly distribute the oil, that the lime compound be used in *double* the quantity of magnesium carbonate usually employed, on account of its much less bulk. The official quantity of the lime compound should be 8 gm. to the 1,000 cc. of the medicated water, and not 4 gm., as directed.

It is best to add, as the Pharmacopoeia directs, all the water to the admixed lime compound and oil before filtration. The practice of some pharmacists adding only a part of the water, throwing on a filter and then adding further water from time to time, to the contents of the filter until the required amount has filtered through, cannot result in as strong a solution as if the oil had been brought in intimate contact with all the water at once.

There is one detail whereby the official process can be greatly improved, and that is by using in place of the distilled water *hot boiled* water, i. e., water boiled and cooled to a point just short of boiling. In following this practice, the writer adds the water to the admixed lime compound and oil, places it in a proper vessel, covers tightly and filters after it has stood for some hours, preferably over night.

The use of hot, boiled water has a number of very decided advantages. These are a maximum solution of the oil and an increased pregnancy of the water. Boiled water is far more germ proof than the usual distilled water of commerce, which is believed to be, in some cases at least, simply condensed steam-waste.

Criticism may be made against the use of nearly boiling water for making aromatic waters, on the ground of loss of volatile oil, but practical experience will show that this loss is more apparent than real, that the amount of volatile oil lost by volatilization is insignificant in comparison with the greatly increased amount brought into solution.

The Preparation of Phospho-Glycerate of Calcium.*

Phospho glyceric acid, which was discovered by Pelouze in 1840, by acting on glycerine with anhydrous or glacial phosphoric acid, was also obtained about the same time by Gobley by decomposing the lecithine of eggs by acids. Since, Lehman has proved its presence in diseased nervous matter, and more recently Thudichum and Kingzett prepared it by boiling cephaline ($C_{45}H_{71}NPhO_{11}$) with baryta water.

But, however interesting these methods of preparing it may be from the physiological and purely chemical standpoints, they are of no value commercially now that the phospho-glycerates may be called upon to perform an important part in modern therapeutics.

Having been interested for a long time in the question of phosphated milk, which is furnished by cows undergoing superphosphated feeding, and finding in the course of our analytical work on the subject that this milk contained but little more calcium phosphate than the ordinary, we determined to try the glycerophosphates and consequently to study the mode of preparation.

* Translated for the A. D. & P. R. from a paper by L. Portes and G. Primier in the *Repertoire de Pharmacie*.

* Read before the Pennsylvania Pharmaceutical Association.

The first attempts, following the method of Pelouze, although it demonstrated the difficulties of obtaining the calcium salt on a commercial scale, as the cost would be about 200 fr. per kilo, furnished sufficient to institute a series of experiments which were very satisfactory in results, and having foreseen, from these, that phospho-glycerate of calcium was the only therapeutical agent which could replace the phosphorus wasted in the system, and after many trials in the hospitals of Paris—trials which have since been confirmed by physicians in other parts of the world,—we determined to find a more expeditious and less costly method of preparation. This process, which is as follows, yields a pure article at a moderate cost.

Take 8 kilos of phosphoric acid, 60 per cent., 3 kilos 600 gms. of glycerine, sp. gr. 1.24, mix together and keep at a temperature of 100 to 110° C. for six days, agitating three or four times daily. It commences to color and emit fumes on the second day; the fifth day it will have turned brown and ceased to fume; on the seventh day it is allowed to cool, and is then viscous and transparent. After cooling the free acid is neutralized by a mixture of 500 gms. calcium carbonate in 2 kilos of water, and then allowed to settle for two or three hours, when more of the chalk mixture is added and the process repeated till all the acid is saturated, which generally takes about two days. The mixture is then filtered and the filtrate exactly neutralized with milk of lime, filtered again and then precipitated by means of 90° alcohol.

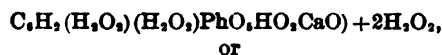
The precipitate which forms settles very rapidly; after about an hour the supernatant fluid is decanted, the precipitate is washed and drained. It is then redissolved in cold water, filtered and evaporated at a low temperature.

The salt thus obtained is a white, crystalline powder, soluble in 15 parts cold water, almost insoluble in boiling water, insoluble in alcohol, and giving with ammonium molybdate only a slight phosphoric acid reaction; calcined and dissolved in nitric acid, it produced on the contrary an abundant characteristic precipitate.

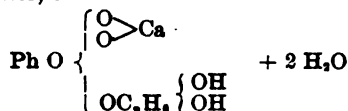
After drying at 110° C. analysis of three samples taken from lots prepared at different times gave the following figures:

	No. 1.	No. 2.	No. 3.
Lime	23.18	21.29	23.50
Phosphoric acid	27.86	28.01	28.83

The formula, $C_2H_5CaPhO_3$, established by Pelouze for a salt dried 170°, would require 26.66% of lime and 33.80% of phosphoric acid. The formula, $C_2H_5CaPhO_4$, requires 23.76% of lime and 28.86% of phosphoric acid, figures closely approximating those found by us. Phospho-glycerate of calcium obtained by our process, and such as will be utilized in commerce, will have the formula $C_2H_5CaPhO_4 \cdot H_2O$, or $C_2H_5O_4(PhO,HO,CaO) + 2H_2O$, following which the constitutional form would be:

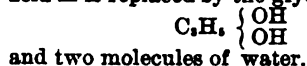


or
A dicalcic phosphorine, with 2 molecules of water, or



that is to say, phosphoric acid in which 2 atoms of H of the acid hydroxyl are replaced by one of calcium, and the other

acid H is replaced by the glyceric radical:



Pharmaceutical Notes.*

BY CLEMENT B. LOWE.

TEREBENUM OR TEREBENE.

This has come into somewhat extensive use as a remedy for chronic bronchitis, and it is frequently an ingredient of cough mixtures, or is prescribed by itself.

On account of its slight solubility in water, and its somewhat unpleasant taste, it is best given in an emulsion.

The emulsion should be made by the addition of one drachm of powdered gum arabic for each fluid drachm of terebene.

The primary emulsion, consisting of gum and water, should first be carefully prepared and then the terebene should be slowly and carefully added.

The emulsion will be found quite a difficult one to make, the terebene being easily thrown out of solution.

MUSTARD PLASTER.

The mustard plaster is one of the most important remedies kept in our pharmacies, and yet as far as I know none of the manufacturers have included in their directions that of wetting the plasters before using with only tepid water.

The acrid or volatile oils of mustard do not pre-exist as such in the seed, but are produced by the splitting up of the glucosides sinalbin or sinnigrin, by the action upon them in the presence of moisture of the ferment called myrosin.

It is a fact that should be better known that myrosin is coagulated by water of a temperature of 140° F., and rendered incapable of action.

I have found that many people are under the impression that the plaster will be made the more active by dipping it into hot water, but the reverse is the case.

SYRUP OF ACACIA.

It seems strange that the Pharmacopoeia should have continued unchanged the formula for syrup of acacia.

In the Pharmacopoeia of 1870 the syrup was made directly from the gum, and we had a fairly stable preparation.

In the last two Pharmacopoeias it is ordered to be prepared from the mucilage, which spoils quickly, and the syrup thus made would ferment in a few hours, unless the mucilage was freshly prepared.

The formula of mucilage of acacia can be improved upon by the use of chloroform water of the strength given in the British Pharmacopoeia.

If the chloroform is objectionable from a therapeutical standpoint, a few minutes' exposure to heat will thoroughly dissipate it.

The most convenient way of dissolving the gum is by means of a dialyser.

ADULTERATION OF BELLADONNA ROOT.

This last winter, on examining some belladonna root, I was surprised to find present a number of large pieces of poke root.

As the former root is indigenous to Europe and the latter to the United States, and as the structure of them is entirely different, it could hardly have been an accidental adulteration.

The cork layer of the belladonna is of a very light brown gray color, while that of the poke root is of a yellowish brown gray and marked by very characteristic trans-

*Read before the Pennsylvania Pharmaceutical Association.

versely elongated corky warts of a lighter color.

The transverse section of the former shows a fine black cambium line, and the woodwedges, when present, are of a light yellow color, radially arranged; in the poke the wood tissue is whitish, and shows a decidedly concentric arrangement.

CAMPHOR.

I have pleasure in calling your attention to an excellent article of camphor, made at the Sumitomo Refinery, Kobe, Japan, and imported by Smith, Kline & French Company.

It comes in boxes very neatly made of wood, pasteboard lined, containing one pound net by actual weight.

The style of package prevents evaporation, and being divided into ounce cakes there is no loss in retailing.

It is less translucent and crystalline than ordinary refined camphor, and is probably made by submitting powdered camphor to powerful pressure.

One part is perfectly soluble in 0.7 parts of alcohol, and sublimes without leaving any residue.

It seems probable that in many industries Japan is going to be an active competitor, not only with European nations, but also with our own.

FLUID EXTRACT TRITICUM REPENS.

The question is asked in query 8, "What is the cause of the active effervescence which takes place when fluid extract triticum repens is added to a carbonate?"

If active effervescence occurs, I should think it due to fermentation having taken place.

The fluid extract is made by first percolating with boiling water, afterward evaporating and adding 25 per cent. of alcohol.

As the medicinal constituents consist of three sugars, two of them directly fermentable, if too much time be taken in percolating and evaporating, there is apt to be some fermentation before the alcohol is added. [See note on this preparation on page 8 by Galen Jr.—Ed.]

Home Made Extract of Beef.

BY JACOB PRICE, M. D.

West Chester, Pa.

A reliable and palatable extract of beef, that can be quickly prepared, and at less cost than most of the preparations of this class upon the market, is an important desideratum. I have found such an extract made in the following manner very satisfactory. It is somewhat in the line of Liebig's original formula.

Take of official hydrochloric acid, f3i; essence of pepsin (Fairchild's, I have commonly used), f3ij, and mix them. Of this mixture three teaspoonfuls are to be added to one pound of finely minced lean beef and placed in a quart jar, which is to be nearly filled with cold water. The jar should be tightly covered, the mixture well shaken, and the shaking repeated every half hour. It must be kept cool—in hot weather on ice. After two hours it will be ready for use.

The amount ordinarily taken at one time would be about f3ij. This should be salted to taste, and five drops of tincture of capsicum added. Where there is much objection to the taste, a little Burgundy wine may be added.

These directions may appear to some to include an amount of unnecessary detail, but in the preparation of such an extract, as in most other matters in medicine and surgery, it is careful attention to detail

that alone insures success. Frequently it is necessary to especially emphasize the instructions as to shaking, and the avoidance of boiling or in any way heating the preparation. The beef should be allowed to remain in the jar till all is used that can be taken up with a spoon; then considerably more of the extract can be obtained by turning the beef out into a strong linen towel and twisting it firmly.

Such a concentrated, partly digested food is particularly indicated in cases of gastric catarrh, and in other conditions, acute or chronic, attended with deficiency of the normal secretions of the stomach. I also depend very much upon it in cases of typhoid fever and pneumonia. It is more readily assimilated than any other article of food that I know of—*Phil. Poly. Jour.*

A Critical Study of Bettendorf's Test and its Modifications.*

BY DR. CHAS. O. CURTMAN.

Chairman of Research Committee B.

A number of experiments have been made for the purpose of ascertaining the conditions most favorable to the result of the test for arsenic by stannous chlorid (Bettendorf's test and its modifications).

The inquiry was directed to the following points:

1. The limit of sensitiveness of the test in its various modifications.
2. The best proportion of reagent to specimen.
3. The influence of the use of metallic tin together with the stannous chlorid.
4. The influence of the presence of other substances in the specimen tested.

I. LIMIT OF SENSITIVENESS.

The following reagents were used:

a. The solution directed for Bettendorf's test by the U. S. P., consisting of a saturated solution of pure stannous chlorid in pure concentrated hydrochloric acid. The specific gravity of this solution was = 1.467.

b. Metallic tin, perfectly pure, in thin cylinders, from which shavings of about 0.1 Gm. were taken as needed.

c. Stannous chlorid solution prepared according to the German "Arzneibuch" by saturating a mixture of 5 parts of crystals of stannous chlorid and 1 part of hydrochloric acid with dry hydrochloric acid gas. The specific gravity was = 1.912.

All the materials used were previously tested for absence of arsenic by Gutzeit's test, so as to exclude any fallacies arising from the introduction of even small traces of arsenic by the reagent, which might cumulate with those in the specimen.

It is easy enough to procure pure metallic tin, but impossible to obtain from local dealers hydrochloric acid sufficiently free from arsenic to stand Gutzeit's test for one hour; so that I had to distill from purified sulphuric acid and pure sodium chlorid the hydrochloric acid required for the preparation of the reagents.

A number of specimens of arsenic solution were made, containing free trioxid, sodium metarsenite and sodium arsenate in such proportion, that each set corresponded exactly to an equal amount of As. They were:—*Arsenic trioxid* (As_2O_3 = 197.68), of which 1.81062 Gm. contain 1 Gm. of As.

Sodium metarsenite (Na As O_2 = 129.82), of which 1.7332 Gm. contain 1 Gm. of As.

*Report No. 1, of Research Committee B, of the Committee of Revision of the U. S. P., 1890, read at the meeting of the Missouri Pharmaceutical Association.

Sodium arsenate, U. S. P. ($\text{Na}_2\text{H As O}_4 + 7\text{H}_2\text{O}$ = 311.46), of which 4.51834 Gm. contain 1 Gm. of As.

The solutions used for experiments contained from 0.5 Gm. to 0.01 Gm. of As.

Of these 1 Cc. was used for each trial and the amount of reagent mixed with this varied from 1 Cc. to 3 Cc. so as to correspond with the limits prescribed in the pharmacopoeial tests. When metallic tin was added to the reagent, 1 Cc. each of the specimen and the stannous chlorid solution was used. In some cases of doubt a tenfold quantity (10:30 Cc., etc.) was used, to obtain sufficient material for colorimetric comparison.

A uniform application of heat was effected, whenever needed, by imbedding the series of test tubes under observation to an equal depth into a sandbath, heated to about 80° C.

Whenever comparisons of color became necessary to decide whether a deeper color had been produced than that of the unaffected reagent (as was especially necessary with the yellowish solution of the German Pharmacopoeia), or whether a greater or less intensity of color characterized the reaction, narrow graduated cylinders of 10 cubic centimetres capacity, were used in a dark box, with light reflected from beneath, or occasionally, for still greater accuracy, a pair of Hohner's colorimeter cylinders of 100 Cc. capacity, also placed for observation into a dark box, admitting from beneath light reflected upward by a plate of milk glass, placed at an angle of 45°.

With the aid of these appliances the following results were obtained:

a. With the U. S. P. solution of stannous chlorid, of specific gravity 1.467, 1 Cc. of each of the three specimens, containing 0.5 Mgm. of As was mixed in the different proportions stated below, and kept at ordinary temperature for one hour.

With 1 Cc. of reagent a sharp reaction had taken place at the end of the hour.

With 2 Cc. of reagent the reaction was obtained earlier and was more intense at the end of one hour.

With 3 Cc. of the reagent, the reaction was still more speedy and at the end of the hour more intense.

No difference could be noticed either in time or in intensity between arsenic in the state of trioxid or pentoxid.

When the test tubes were arranged exactly as before, but placed in hot sand, the time was somewhat shortened, and a slight increase of intensity noticed in all of the specimens.

b. When 1 Cc. of the U. S. P. solution was used with 1 Cc. of solutions containing 0.5 Mgm. of As and a small piece of metallic tin added, and heat applied, the reaction was almost instantaneous, and in 3 minutes very sharp, unmistakable coloration appeared, which continued to increase in intensity for about 10 or 15 minutes, but was not notably darker at the end of the hour. No difference appeared in the different solutions containing arsenite or arsenate.

c. When from 1 to 3 Cc. of the stannous chlorid solution of the German pharmacopoeia was used with 1 Cc. of the solutions containing 0.5 Mgm. of As, there was a slight darkening of the color in a few minutes, which continued to increase to the end of the hour. No difference was perceptible between the arsenous and the arsenic preparations. At 15 minutes, the specimens treated by the U. S. P. solution and metallic tin showed a much greater intensity of color, but toward the end of the hour there was but little dif-

ference perceptible between the color of the specimens treated with 3 Cc. of the German reagent, without heat, and that treated with 1 Cc. of the U. S. P. reagent, metallic tin and heat. The specimens containing less than 2.5 Cc. of reagent showed a less intense color.

These experiments were repeated with the three solutions containing 0.5 Mgm. As in 1 Cc. and resulted as follows:

a. With the U. S. P. solution of Sn Cl₂ :—

1 Cc. of reagent gave no reaction during 45 minutes, then gradual coloration began. If heat be applied the reaction begins in 18 minutes, and at the end of one hour is slightly more intense than when treated without heat.

1.5 Cc. of reagent: reaction slightly more rapid and intense than with 1 Cc.

2.0 Cc. of reagent: still more rapid and intense, both with or without heating.

2.5 Cc. of Sn Cl₂: reaction begins in 15 minutes at air temperature, in less than 5 minutes when heated.

3.0 Cc. of Sn Cl₂: reaction slightly less intense than with 2.5 Cc., both hot and cold.

3.5 Cc. of reagent: a still further slight decrease in intensity.

No difference could be observed in the reaction of As₂O₃ and As₂O₅; the sodium metarsenite appeared to be very slightly more colored than As₂O₃.

b. With 1 Cc. of U. S. P. solution and a small piece of metallic tin, at a temperature of about 80° C., 1 Cc. of the solutions containing 0.05 Mgm. of As began showing a brownish color at 18 minutes. At 35 minutes the reaction was quite sharp and continued to grow slowly in intensity to the end of the hour.

No difference was perceptible between As₂O₃ and As₂O₅.

c. 3 Cc. of the solution of the "Arzneibuch," mixed with 1 Cc. of the solutions containing 0.05 Mgm. of As began showing a feeble reaction at 35 minutes, and at the end of the hour, showed a plain reaction, as compared with the unchanged solution, but did not equal in intensity the reaction produced by the addition of metallic tin.

On repeating the experiments with solutions containing 0.03 Mgm. of As in 1 Cc. a feeble reaction resulted from the use of stannous chlorid and metallic tin at the end of an hour, but even after standing over night, the other methods gave such a faint reaction, that it required close inspection in the colorimeter to perceive the change. A solution containing 0.02 Mgm. of arsenic failed to show any reaction. So I think that for practical purposes, the utmost limit of reaction is reached at 0.03 Mgm. of As in 1 Cc. and that the method employing metallic tin and heat is to be preferred, where the presence of antimony or bismuth does not forbid its use. Even the addition of pure concentrated sulphuric acid, which was recommended when the test was first introduced, has not yielded to me any substantial advantage in detecting the presence of arsenic in the greater dilutions.

2. THE BEST PROPORTION OF REAGENT TO SPECIMEN.

In the foregoing experiments and a number of others conducted for that purpose, it was observed that both with the U. S. P. solution (without the use of metallic tin) and with that of the German Pharmacopoeia, the greatest intensity of color obtained after an hour's reaction occurred when 1 Cc. of the arsenical solution was mixed with 2.5 Cc. of the reagent. Between 3 Cc. and 2 Cc. of the

German solution hardly any difference could be found. But with the pale U. S. P. solution a very slight difference appeared in favor of 2 Cc. as against 3 Cc. Heat did not appear to affect the proportion needed.

When metallic tin was added it seemed to be best to use equal volumes of specimen and reagent, although the variable amount of dark coatings of reduced arsenic adhering to the tin prevented an accurate comparison.

3. INFLUENCE OF THE USE OF METALLIC TIN TOGETHER WITH STANNOUS CHLORIDE.

When metallic tin is heated with pure concentrated hydrochloric acid, a copious evolution of hydrogen results. When heated with the saturated solution of stannous chlorid in hydrochloric acid, the evolution of hydrogen is but scant. When arsenic is mixed with the solution, the evolution of gas is perceptible, but very feeble. Very little arsin appears to be evolved, for a paper cap with a drop of acidulated silver nitrate does not show any evidence of reduction by As H, for over fifteen minutes, and even at the end of an hour but a very faint arsenic reaction is seen. To ascertain whether any of the arsin formed, would react with the stannous chlorid and thus hasten the reduction of As, I arranged a small apparatus in which a copious current of arsin mixed with hydrogen was generated, and, after passing through a bottle filled with dry cotton, was permitted to bubble through stannous chlorid solution of the U. S. P. After more than an hour's time, not a trace of coloration could be detected.

So that after arsin has once been formed, it is not again decomposed by stannous chlorid. Hence the prompt action of metallic tin must depend upon the nascent hydrogen, which aids the stannous chlorid in reducing the trioxid and pentoxid.

But however satisfactory the action of metallic tin in accelerating and intensifying the reduction of arsenic, it cannot be employed to detect arsenic in preparations of bismuth or antimony. For the metallic tin reduces both of those metals and precipitates them from their solution as black flocculi, which aggregate into small granular lumps. There could be a distinction made between the firm flocculi of Sb or Bi and the finely divided brown particles of arsenic, but it would hardly be safe to trust to this appearance for a sufficient evidence of the presence of arsenic, and the preparations of Bi and Sb must be tested without the aid of metallic tin.

A number of specimens of pure bismuth and antimony salts were tested with the U. S. P. and the German solution of stannous chlorid in various proportions. But neither at ordinary temperature, nor when heated did the least coloring occur.

4. INFLUENCE OF THE PRESENCE OF OTHER SUBSTANCES IN THE SPECIMEN TESTED.

The preceding experiments were made with a solution of either arsenic troxid or sodium arsenite or arsenate in water, other substances being absent. But in testing various chemicals for traces of arsenic there are different conditions, as the arsenic forms only a very small portion of the mixture. In the U. S. P. the Bettendorf test is directed for 11 preparations: For hydrobromic, hydrochloric, phosphoric and sulphuric acid, 1 Cc. of the acid is to be tested by mixing with 1 Cc. of the reagent, adding a small piece of tinfoil and heating. In case of magnesium sulphate 1 Gm. of the dry substance is to be shaken with 3 Cc.

of the reagent, metallic tin is then to be added and an hour allowed for the appearance of the reaction; sodium phosphate and pyrophosphate are treated in like manner, but heat applied and 15 minutes time given.

In case of antimony and potassium tartrate, antimony oxide, bismuth subcarbonate and bismuth subnitrate, it was intended to test with stannous chlorid alone for an hour, but by an unfortunate misunderstanding of the transcriber, tinfoil was directed to be added, which will reduce Bi and Sn as well as As.

To find whether any of the chemicals directed to be tested by the stannous chlorid method could influence the detection of arsenic, specimens were prepared containing the pure chemicals, shown to be free from arsenic by other tests, and with these small portions of arsenic were mixed, and the tests compared with those in which arsenic was present in equal amount without admixture with the chemicals.

In no case could any difference in the intensity of the test be made out, nor were the differences in the time of the occurrence of the coloration sufficiently great or regular to justify the assumption that the reaction was impeded or accelerated by the presence of other salts.

Further Contribution on the Alkaloidal Assays of Drugs.*

BY KARL SCHWICKERATH, PH.D.

In my last contribution to the alkaloidal assay of drugs and galenical preparations, I proposed to substitute the use of a mixture of petroleum ether (boiling-point about 50° C.) and chloroform, in the proportion of 2 to 1, for absolute ether in the extraction of the alkaloids. Not only on account of its costing less is this mixture to be preferred, but, as experience has shown, an absolutely pure alkaloid is obtained by this method. In additional experiments I have further tried to substitute the ether in "Prolius mixture" by petroleum ether-chloroform. In the "Prolius mixture" the alcohol is added for the purpose of moistening the dry cells of the drug in order to facilitate the penetration of the ether. But as alcohol is not miscible with petroleum ether-chloroform, and as the alkaloids are, moreover, soluble in alcohol, for obvious reasons the latter cannot be used in this operation for moistening the drugs. As most alkaloids are soluble with difficulty, or nearly insoluble, in water, and as, on the other hand, petroleum ether-chloroform is not miscible with water, there is no objection to the moistening of the drugs with water.

I deem it but just at this point to call attention to the fact that, after my experiments in this direction had been for some time under way, C. C. Keller, of Zurich, made known the fact that he was using water as a moistening agent in some alkaloidal assays. I have obtained very good results by this method, the percentages of alkaloids not being less than those obtained with the method given by me in this journal (vol. vii, p. 534, and vol. viii, p. 56), the exceptions being hyoscyamus and stramonium.

On account of the relatively ready solubility of hyoscyamine in water, the results obtained by this method were, as might naturally be expected, too low; therefore, for these two drugs the "Prolius mixture" is to be preferred.

The method of procedure in the exam-

ination of a drug would consequently be as follows:

First, the drug is to be moistened with a sufficient amount of water, whereupon a certain quantity of petroleum ether-chloroform and strong ammonia is to be added and this mixture is to be shaken vigorously for several hours.

The alkaloids are dissolved in the petroleum ether-chloroform; an aliquot portion of the solution, filtered through cotton, is placed in a shallow glass vessel containing 10 Cc. of dilute acid. Petroleum ether and chloroform are then evaporated at a low temperature, a current of air being passed over the solution during the process. Chlorophyll, resin, wax, etc., are deposited upon the surface of the acid alkaloidal solution; the resinous and waxy particles adhering to the glass are to be thoroughly worked out with the dilute acid by means of a little platinum spatula or glass rod, whereupon the solution is filtered through paper either into the *perforator* (if the *perforation method* is used),† or into a *separator funnel* (if the *shaking method* is preferred). The filter, as well as the glass vessel, is to be washed by small, successive quantities of water, used to extract the resinous matter. The acid-alkaloidal solution thus obtained is of such purity that in most cases washing of this solution with petroleum ether is unnecessary and the alkaloid may be extracted with petroleum ether-chloroform directly. Further details may be learned from the annexed tabulated results. The drugs here taken into consideration are not especially selected, but were submitted to me for examination in the regular course of manufacture.

With some alkaloids, such as the cinchona alkaloids, hydrastine, etc., it may happen that towards the end of the extraction, if the alkaloidal solution is too concentrated, the alkaloids will crystallize out, which renders their extraction considerably more difficult. In this case muriatic acid should be added through the little funnel until the liquid is decidedly acid, the solution being stirred up with the stem of the funnel; and after the alkaloids are again dissolved they should be reprecipitated with alkali.

In the examination of conium I adopted a proposal of Liljenstroem,* placing in the little flask 10 Cc. of sulphuric acid at the beginning of the extraction. I think, however, that benzin answers better for the extraction of coniine than does sulphuric ether. In the drug, as well as in the extract of conium, it is very probable that ammonium compounds are present; the caustic soda or sodium carbonate added for the separation of coniine would not only set free the coniine but also ammonia, which would be carried over into the flask by the ether saturated with water, and so cause a higher result. In the use of benzin this defect is largely removed.

The annexed assay methods given for the drugs are of course also applicable to the examination of *fluid* and *solid extracts*. In place of the given weight of drug, the corresponding volume in cubic centimeters of fluid extract and about the fifth part in weight of solid extract are to be taken. The latter is to be dissolved in dilute alcohol and then evaporated—as with the fluid extract—on the least possible amount of cleansed sawdust, at a moderate temperature. The dry mixture thus obtained is then to be moistened with a sufficient quantity of water and treated in the same way as the correspond-

* *Pharm. Ztg.*, 1894, p. 56.

† *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, Vol. xxii., p. p. 180, 372, and Vol. xxiii., p. 113.

ing drug. The extracts of cinchoha, ipecacuanha and nux vomica can be worked up directly, as I have shown in this journal, February, 1894, pages 56-57. [The author gives full tables of the results attained by these methods.]

Drug Adulterations.*

CRUDE DRUGS.

One of the most interesting events of the year, in the field of adulterations, was an attempt to introduce into the United States from England, badly adulterated asafoetida. Some of the samples that our dealers tried to get in and palm off on retailers, contained only about 15 per cent. of gum, instead of the regulation 50 per cent. of the custom house. Several large orders of ipecac root have likewise been returned because of adulteration with other roots, and also because of a superabundance of stems. It is said, however, that these same goods are likely to be made into powdered ipecac and again returned in a form that is more difficult to guard against fraud. It is a good thing that customs officers are trying to perform their duties properly at present, and it is to be hoped that they will continue in such well-doing.

LIQUORS.

It is probable that our liquor supplies are tampered with as much or more than any other class of goods carried by pharmacists. Of five samples each of brandy and whiskey, as supplied to the metropolitan retail trade, only two of one and one of the other could be deemed good. Two of each contained less than 40 per cent. of alcohol by volume, and three of the brandy and four of the whiskey were colored with caramel and flavored with essential oils. Every druggist should test his stock of such goods and report to his jobber. The State liquor law has practically made it impossible for a druggist to sell enough in ten years to pay his license for a single year. There are no drug stores known to this committee where doctors prescribe enough liquor to pay anything like \$20 per year. If, then, any is kept in stock, it should be of the best quality. Any pharmacist can apply one or two rough tests that will answer his requirements. When half an ounce of liquor is shaken up with two drams of concentrated ether, on settling it should show a line of demarkation at the same height as when the same test is applied to a sample of dilute alcohol that he knows to contain 50 per cent. by volume of absolute alcohol. On evaporating a weighted quantity over a water bath, the dried residue should not weigh more than $\frac{1}{10}$ of the total weight, and should not taste or smell of caramel, and should not taste unusually sweet or have a spicy flavor.

MUSTARD.

If there is any article that beats liquor in amount of sophistication, it is probably mustard. Extensive dealers positively assert that a perfectly pure mustard can not be sold. The public will not buy it. Of three brands examined, all contained turmeric and flour in varying amounts. Not long ago Mr. Hans M. Wilder reported an examination of mustard and rhubarb, and the finding of tumeric in each. On this suggestion, some rhubarb was examined.

*From the report of the Committee on Adulteration of the New York State Pharmaceutical Association, read at an annual meeting in Saratoga Springs, June 23, 1894.

RHUBARB.

Of three samples bought in New York two gave evidence of tumeric by Mr. Wilder's test; 17 bought in the interior of the State from as many druggists all turned out good. Mr. Wilder's test for tumeric in rhubarb or mustard is a very simple one. A little powdered rhubarb or mustard is placed on a slide with some essential oil such as anise, fennel or sassafras. Examination under the microscope reveals a yellow zone around every speck of tumeric. When this drug is absent the microscope field is uncolored.

GINGER.

For some time past, the English courts have been busy prosecuting druggists and grocers for selling powdered ginger adulterated with the same drug that had been exhausted. A large number have been fined, no matter what excuse they gave. Here in America the demand for powdered ginger, in our large cities at least, is not great enough to tempt cupidity to such a trick. It is a cute one, however, and might be thought worthy of the proverbial Yankee. This plan of making money does not seem to have crossed the Atlantic yet. Of 15 samples bought in our interior cities and villages all were good, and three from New York were likewise unobjectionable. It might be well to watch this article in future, as tricks of this kind are catching, and as our jobbers have plenty of exhausted ginger and other drugs left over during manufacturing, an unscrupulous one may take to it.

CAPSICUM.

Out of 17 samples examined, 18 were good, 1 fair and 8 inferior.

DANDELION.

Out of 12 samples examined, 10 were good, 1 fair and 1 inferior.

DILUTED ACETIC ACID.

Two hundred and thirty-one samples were examined. Good (5.5 to 7.5 per cent.), 61; fair (4.5 to 5.4 per cent.), 52; inferior (under 4.5 per cent.), 78; excessive strength (over 7.5 per cent.), 84; not as called for, 6. Varied from 1.20 to 85 per cent.

DILUTED HYDROCHLORIC ACID.

Two hundred and thirty-two samples were examined. Good (9 to 12.5 per cent.), 151; fair (7.5 to 8.9 per cent.), 45; inferior (below 7.5 per cent.), 32; excessive strength (over 12.5 per cent.), 4. Samples varied from 1 to 18.10 per cent.

DILUTED SULPHURIC ACID.

(Standard same as for preceding.) Two hundred and fifty-nine samples were examined. Good, 171; fair, 38; inferior, 11; excessive, 44. Varied from 1.80 to 25 per cent.

AROMATIC SULPHURIC ACID.

Two hundred and eighty-nine samples were examined. Good (16 to 25 per cent.), 29; fair (13.5 to 16 per cent.), 93; inferior (under 13.5 per cent.), 167. Varied 1.80 to 25 per cent.

WATER OF AMMONIA.

Two hundred and ninety-seven samples were examined. Good, 77; fair, 66; inferior, 94; excessive strength, 54; not as called for (that is, error in sale), 6. Samples varied from 1.60 to 25.60 per cent.

STRONGER ETHER.

One hundred and forty-four samples were examined. Good, 91; fair, 7; inferior, 46. Specific gravity varied from 0.724 to 0.771.

COMPOUND SPIRIT OF ETHER.

Two hundred and six samples were examined. Good, 54; fair, 22; inferior, 129; not as called for, 1. Inferior samples were deficient in or destitute of ethereal oil.

TINCTURE OF IODINE.

Two hundred and thirty-seven samples were examined. Good (7 to 10 per cent.), 57; fair (6 to 7 per cent.), 96; inferior (under 6 per cent.), 81; excessive strength (over 10 per cent.), 3. Varied from 1.20 to 12.40 per cent.

COMPOUND SOLUTION OF IODINE.

One hundred and nine samples were examined. Good (4 to 7 per cent.), 68; fair (3 to 4 per cent.), 23; inferior (below 3 per cent.), 7; excessive strength (above 7 per cent.), 1; not as called for, 10. Per cent. of iodine varied from 0.30 to 9.10.

MAGNESIA.

One hundred and eleven samples were examined. Good, 52; fair, 8; inferior, 50; not as called for, 6.

CREOSOTE.

Two hundred and twenty-two samples were examined. Good, 119; fair, 1; inferior (chiefly carbolic acid), 102.

The condition of the drug market in Ohio, especially around Cincinnati, must be very bad, if we can judge from the reports of Food Commissioner McNeal. Had your committee had the time at its disposal, the same kinds of goods would have passed our inspection, so that we could have compared our own supplies with theirs. Their examination of cod-liver oil has proven that a large amount of it now on the market is adulterated with cottonseed oil, and many preparations of wine and cod-liver oil have been proven to contain no cod-liver oil whatever. Some samples of lemon oil have disclosed 55 per cent. of turpentine, 15 per cent. of resin, 25 per cent. of lemon oil, and 5 per cent. of water and alcohol. Juniper oil is found to be in about the same condition, and in a number of preparations of wine, beef and iron, no beef is discoverable, and but a very small quantity of iron salts. It is probable that the names of the producers of these spurious articles will be disclosed by the commission.

In other drugs, the following summary tells what Commissioner McNeal found in the drug stores of his city:

Cream of Tartar.—Grossly adulterated.
Alcohol.—Diluted with water.
Salol.—Short weight.
Borax.—Not pure.
Epsom Salts.—About one-half strength.
Cinchona Bark.—Cheapest grade.
Opium.—Exhausted, used before for tincture.
Spices.—Adulterated with cheap grade meals and starches.
Cinnamon.—Mixed with allspice and common oak bark.
Linseed Meal.—Deprived of oil.
Quinine.—Inferior quality and short quantity.

We do not think the New York market would, in any of these articles, make as bad a showing. In some of them we know that in the past years of our work no such bad results appeared. For a long time it has been reported that phenacetin is being adulterated with acetanilid. In all past examinations of this article no such sophistication had ever appeared until, during the past winter, one such sample turned up.

PROPRIETARY ARTICLES.

It is a common thing for pharmacists in and out of the State to ask us to discover for them the composition of certain proprietary articles that are having considerable sale in their regions. In response to these calls a number of these preparations

have been examined, not always exhaustively, but for the purpose of discovering, if possible, their active constituents. The latest of these calls have been for Antikamnia, Soothing Syrup, Paskola, Samaritan Nervine, and a number of hair dyes. A Macedonian cry from far-off Colorado asks for the active constituents of Birney's Catarrh Cure, but we have not yet had time to carefully examine it. A preliminary test has given approximate evidence, and the results will be revealed later.

In the case of Antikamnia a large number of analyses have been reported, no two of which are exactly alike. Either the manufacturers alter the composition immediately after its exposure, or the chemists have not worked with sufficient care. As our quantitative determination has not yet been verified by re-trial, we will content ourselves with merely giving the ingredients at present. There can be no doubt of its containing acetanilid as its chief constituent. With equal certainty we can affirm the presence of caffeine. Citrate of sodium is also present in every sample so far examined. Whether they introduce it into their preparation in this form is in doubt. The presence of sodium bicarbonate is also certain. There is some sodium carbonate likewise, but whether introduced as such by the manufacturers is doubtful. There is no tartaric acid nor tartrate in the article they now make. The fusing of a small sample in a test tube tells immediately a genuine Antikamnia from a spurious one. The behavior of the citrate of sodium in the melted acetanilid is the cause of the difference. Out of eight samples bought in Brooklyn, three proved to be bogus. They were all bought from parties that there were reasons for suspecting. This is why the proportion is large. It is not likely that three more could be found in the city.

Winslow's Soothing Syrup has, from time to time, been reported as containing morphine, and in dangerous amounts. The examination of one bottle revealed the presence of this alkaloid with certainty. An exact determination of the quantity would have required a number of bottles and more time than could then be given.

Paskola is a new remedy that has lately been very extensively advertised. The proprietor puts it forth as a food rather than a medicine. Our well-beloved C. H. Butler must have been trying to perpetrate a joke upon them when he wrote: "A young lady just in reports a gain of five pounds after the use of two small bottles of Paskola." Perhaps they know how one pound could become five, and how that young lady guarded against errors in weighing. Did she have exactly the same clothes upon her and exactly the same amount of food and same quantity of water in her stomach at each weighing?

Our analysis of this new proprietary claimant for public favor shows a composition of glucose syrup and muriatic with a little sulphurous acids. The latter are present in the proportion of between two to three-tenths of 1 per cent. total. This seems to be enough to give it a sourish taste, disguise its true character and keep it from becoming alcohol or vinegar. Almost everybody knows the nature of these acids. Their presence in Paskola is absolutely certain. How much reliance, then, can be put upon the claims of a firm that says: "Paskola is *only* a pure starch pre-digested food, combined with natural vegetable ferments which aid the digestion of other foods." On the bottle there is a picture of a pineapple blown in the glass. Supposing that there might be

some truth in this statement of theirs and something suggestive of the figure, an attempt was made to digest a little albumen with a liberal amount of Paskola. The attempt was a vain one. If any pineapple ferment (bromelin) was present it could not be discovered, and had no digesting power. A miracle alone could make their claim reliable. The natural vegetable ferments must have changed into muriatic acid, a thing as impossible as the turning of water into gold.

In their circulars there is nowhere a distinctly made claim that they discovered pre-digested starch, but their words are so framed that such an impression is quite natural. But pre-digested starch is not their discovery. Glucose has been made for years from corn. It is now being made in large quantities, and can be bought at a very low rate. Under its true name public sentiment is rather against its use. Large amounts of it are used in making the cheapest and poorest candies. Candy makers are generally ashamed to confess that they use it at all. The price per pound is much less than that of the cheapest sugar. A full bottle of the size that 50 cents is charged for under the fanciful name, costs but a trifling sum. When the analysis was made it was necessary to get some. After meeting considerable trouble in finding a confectioner who would confess that he had any we finally secured a supply of half a pint. Although the man was a stranger, he frankly acknowledged that its value was so small that he would charge nothing. To all who have used this new proprietary article and think they have derived benefit therefrom, we would advise them to save their money by getting glucose syrup, and to every half pint adding about 25 drops of pure muriatic acid and from 3 to 30 drops of sulphurous acid solution, according to its strength. If the claims made by these people for pre-digested starch were really true, candy-eating children should all be healthy and fat. Those that eat the poorest candy should be the fattest. Solid facts are against them. Injury and not benefit seems frequently to result. The absorption by the stomach directly into the blood of an article that nature never designed to enter by way of that organ cannot be expected to result in permanent good. When starch is digested in the system, the absorption is always in the intestines and by way of the lacteals. If taken as glucose these organs are forced to alter their functions and act in a way nature never provided for. The claim is virtually that the Creator made a mistake which these people have found how to remedy. Physiology is certainly against them. Some of those who take it may require and therefore be benefited by the muriatic acid, but the large majority of those who try it can only in the long run expect injury from its continuous use, since they will not require it. To all such both the glucose and the acid must act as foreign bodies to be discarded rather than assimilated.

The pretense that glucose can take the place of cod-liver oil in the treatment of consumptives seems to the writer to be sheer nonsense, and shoots wide of their own logic. If they really, as they claim, aid nature by pre-digesting starch for their patients, then surely cod-liver oil must aid it more by being several steps nearer the final product aimed at by digestion. The final animal product into which starch must go is fat. Glucose is but a single step in this direction. If one step is good several steps must be better, and these several steps are already taken

in cod-liver oil. They would be right in their theory if they could get their glucose past the stomach and into the intestines before absorption. Then it would enter the right channel and do its intended work. It would thus save labor to the weakened organs. But, unfortunately, the stomach carries it immediately into the blood before being properly prepared therefor, and woe to the poor fellow who has diabetes or even a predisposition to that disease. They will give to such a patient fuel to heighten the flame of the fire that is burning up his life. Such patients rarely know of such a weakness of their constitution and the insidious glucose will sap their vital forces all unknown to themselves until too late. Cod-liver oil is not absorbed by the stomach, but enters the intestines, is changed into an emulsion, and is then absorbed into the lacteals through the channels nature designed such food to go.

Samaritan Nervine is not heard of now as frequently as it used to be. There are, still, however, many who take it and believe they derive benefit from its use. The active constituent was found, on analysis, to be bromide of potassium, of which it contained a little less than 15 grains to the teaspoonful.

Hair dyes are frequently called for, and a knowledge of their composition may often prove beneficial to pharmacists and their customers. An imported article known as "Eau Charbonnier Tinctorial Vegetal," contained in its large blue bottle a solution of nitrate of silver in ammonia water, and in its small colorless one a solution of pyrogallic acid.

Damschinsky's Liquid Hair Dye, brown, contains copper, sulphur, acetic ether and pyrogallic acid all in one bottle.

Imperial Hair Regenerator, dark brown, No. 2 contains in bottle A an ammoniacal solution of the nitrates of silver and copper, while bottle B is a solution of pyrogallic acid.

F. F. Marshall's Adonine, brown, contains in bottle No. 1 pyrogallic acid solution; No. 2 has a solution of nitrate of silver, and No. 3 a solution of chloride of gold. A small bottle of perfumery was done up in the same package.

Eau Merveilleuse contained in No. 1 a solution of pyrogallic acid, and in No. 2 one of nitrate of silver.

Iceland Moss—Two New Preparations.

Oefele gives the following formulæ for the preparation of iceland moss, which is again coming into repute in the treatment of phthisis, anæmia, and other wasting diseases:

INFUSION OF ICELAND MOSS.

Iceland moss.....	so parts.
Ammonium carbonate.....	1 part.
Boiling water.....	100 parts.

Mix and macerate for thirty minutes, then bring to a boil, strain, and to the colute add 70 parts of absolute alcohol. Let stand until settled, then decant and add to the clear liquid 80 parts of liquorice juice. The dose is from one to two table-spoonsfuls thrice daily.

TINCTURE OF ICELAND MOSS.

Iceland moss.....	20 parts.
Ammonium carbonate.....	1 part.
Absolute alcohol.....	100 parts.

Mix and macerate for twenty-four hours, then bring to the point of ebullition, strain while hot, let stand until cold, and finally filter. Dose, 1-2 teaspoonfuls thrice daily.—*The National Druggist.*

Trusts, Pools, and Corners.*

There is probably no industry in the world so honeycombed with combinations of factory owners and traders banded together for the avowed purpose of artificially maintaining the selling price of certain special commodities, as that of chemical and pharmaceutical manufacturers. In raw drugs, indeed, especially in those of vegetable origin, the old monopoly days are gone almost beyond the possibility of recall. These commodities cannot now be brought under speculative control with the same ease as in the days when their sources of supply were fewer, and the trade routes by which they found their way into commerce more easily supervisable. But as a set-off to the greater freedom of competition in crude drugs there is a growing tendency to control by means of rings or syndicates, drugs and chemicals of inorganic origin, and of a kind which can be made available to the consumer only by means of intricate or expensive processes of manufacture. To name only a few of the commodities thus affected, syndicates exist for the object of controlling the price or the output of alkali, mercurial preparations, bismuth and bismuth salts, crude iodine, iodides, cocaine salts, refined camphor and borax, bromine and its preparations, salicylate, oxalic acid, arsenic, sugar of lead, chloroform, phosphorus, permanganate of potassium, and many other of the most important products handled by the pharmacist. With one or two exceptions these combinations, no doubt, dwindle into insignificance beside such mammoth "trusts" as the Standard Oil Company, the Cotton-seed Trust or the American Whisky Trust, but the principle which underlies them all, great or small, is the same, and there is no economic question of the day of more palpable importance to the dealer in chemicals than that of the gradual monopolization of large fields of his activity by organizations whose interests are in direct opposition to those of the middleman, and from whom the consumer has much more to fear than from the unsystematised efforts of a band of small rival producers.

In a little half-crown volume just issued as one of a series on "Social Questions of To-day," Mr. J. Stephen Jeans, the author of several books on commercial questions, gives the results of an inquiry instituted by him into the principles and recent operation of combinations and syndicates to limit production and increase prices.† The material for writing a history of "Trusts" is so enormous that one can hardly expect in an octavo book of 186 pages, more than the barest outline of the Trust system and its influence upon modern commerce, but Mr. Jeans has made good use of the small space at his disposal.

He sets out with the excellent idea of writing a perfect unbiased history of the movement. So imbued is he, indeed, with the idea, that, after all these monopolies, like the Father of Evil in the Golden Legend, may be "working for some good, by us not understood," that he refuses to call them by their usual British name of Rings, and elects the singularly inept American expression "Trusts" as being more inoffensive. But as the author proceeds his wrath with the palpable inequities of the system occasionally gets the better of him, and leads him into spasmodic denunciations of a system which,

after all, is but the natural outcome of modern industrialism, and against which no legislature has yet been able to frame effective enactments. The "conspiring of two or more persons for the purpose of benefiting themselves financially" is probably as old as commerce itself.

Naturally, the economic effect of such "conspiracies" becomes more perceptibly in the same measure as the development of machine production causes the output of almost every class of manufactured commodities to outrun the requirements. Until the beginning of the present reign there still remained in force many of the old English laws against "badgering," or buying in a market before the regular hour; "forestalling," or buying provisions on their way to market "engrossing"—i.e. buying to sell again in or near the same market; and "regrating," by which was meant dissuading persons from taking goods to market, or buying commodities in large quantities to sell again. Under the act Vict. 7 and 8 the whole remnant of these statutes was swept away and throughout the long reign of the commercial policy of Cobden and Bright, which is only now beginning to be seriously challenged, the tendency of legislation was in direct opposition to all interference with commercial and industrial activity. The present position at law of "Trusts" in this country was settled in 1889 by the Court of Appeal. The case which gave rise to this decision was that of the Mogul Shipping Company, who sued a combination of shipowners for unlawful conspiracy to deprive them of their share in the Chinese tea-shipping trade. A ring had been formed to secure control of that trade, and when the Mogul Company, who were excluded from the combination, began to cut the rates, the "Ring" sent a circular to the China merchants warning them that they would lose certain advantages granted to traders shipping tea by the "Ring" vessels if they dealt with the Mogul Company. The court dismissed the Mogul Company's suit on the ground that a combination of traders was not illegal, provided its members did not circulate false rumors or resort to intimidation or fraud.

In France, article 419 of the Penal Code prohibits any combination for the purpose of raising or lowering prices, under penalty of at least one month's imprisonment and a fine of from 500f. to 10,000f. This law is, of course, utterly inoperative. In Germany there is no legislation against syndicates, and hundreds of such combinations exist. Indeed, most of the "syndicates" in pharmaceutical goods to which we have referred are of German origin. The protective tariff of Germany is, of course, of immense advantage to the syndicates, inasmuch as it prevents foreign manufacturers from competing in the home market. The result is that many German syndicates are able to wring large profits out of their own countrymen, and, at the same time, periodically to swamp foreign markets (especially British ones) by shooting out upon them the surplus stock which they cannot place in Germany, and which they can afford to sell at a loss in consideration of the large percentage of gain on their home sales.

The two principal combinations of the present day are the Salt and Alkali Unions. To the latter which he calls the "British Chemical Trust," Mr. Jeans devotes a whole chapter of his book, giving it full and deserved credit for prudent and business-like management. The Salt Union is dismissed with less ceremony, and no reference is made of the fact that its operations have practically resulted in

the loss of our chief foreign markets for the commodity.

In the middle of the fourteenth century the English tinmines were monopolized by a German *entrepreneur*, and a hundred years later all the known resources in alum were monopolized by the "king's merchants," whose business was legalised by a patent granted by Henry VIII. in 1505. In 1601 Queen Elizabeth revoked most of the patents monopolizing industrial produce. About this time (1600) Lord Dundas's alum works, at Whitby, were established. Alum always appears to have had much attraction for the monopolists, for in 1605 James I himself monopolized the manufacture of alum, tobacco, and finished cloth. Four years later, however, the monarch was compelled to revoke these patents.

The United States is notoriously the modern hot bed of trusts and pools. Their activity has become so irksome that several acts have been passed by Congress within the last four or five years to suppress them. The Sherman Anti-Trust Act is the principal one of these measures. All of them, however, when tested before the courts have proved inoperative. The Sugar Trust, one of the most notorious fleecers of the public, was prosecuted by the United States Government in 1892 for contravening the act, but the Government was completely worsted in the encounter. Since the passing of the Sherman Act, in fact, the formation of trusts appears to have increased more rapidly than before. A consular report from Philadelphia, which has just been issued, and which warns British investors against investing in any American undertakings of this kind, enumerates among the "Trusts" now in existence those "handling" glass, iron, iron ore, cordage, leather, cork, bread and still we believe that even such commodities as milk, shrimps, and ice-cream have been "pooled" in certain parts of America. That "notorious footpad of industry, the Distilling and Cattle-feeding Company, better known as the Whisky Trust, which has long been the bane of the American drug trade, appears to have overstepped the latitude allowed even to an American exploiter, and is now being brought to book—not, however, by the authorities, but by private firms.

Although Mr. Jeans devotes a chapter to the function of the State in respect of "Trusts," he does not appear to possess any decided views as to what the nature of that function ought to be. It is indeed, difficult to offer a solution of the question. If it be at all possible to draw a line between the permissible and the non allowable in the matter of combination, it would seem to lie in drawing the line at organizations operating in absolute necessities, such as staple food stuffs, iron or wool, and leaving those confining their business to other articles to fight their own battle with the consumer.

Dead Stock in a Drug Store.*

BY PROFESSOR W. M. SEARBY.

The pharmacist is a professional man, the druggist is a storekeeper and presumably a business man. Few men are so constituted either by nature or training as to combine both. Those very qualities which fit a person to become a pharmacist, seem, in the judgment of many, to be antagonistic to his ever becoming a successful trader. The nicety, the carefulness for minute detail, the exactness and slowness which become a habit to the

*The Chemist and Druggist.

†"Trusts, Pools and Corners, as affecting commerce and industry," by J. Stephen Jeans. London. Methuen & Co., 2s. 6d.

*Read at the recent semi-annual meeting of the California Pharmaceutical Society.

chemist, conflict with the energy and dispatch necessary in business operations. The slow and thoughtful methods pursued in pharmacy, microscopy, and other studies that now form a part of the pharmacist's education, induce a habit that is unfavorable to the successful prosecution of trade. You can push trade, but you can't push chemical and microscopical operations. Patience, watchfulness, caution and scrupulous exactness are needed in pharmacy, but in business you need promptness, energy, decision, with some degree of diplomacy. Is it any wonder, then, that we rarely find all these qualities in any one man?

So well is the dual character of the apothecary of the nineteenth century understood in Great Britain, that he is there called a "chemist and druggist," the term *chemist* implying that he is a scientific man, while the word *druggist* indicates that he is a trader—a man who lives by buying and selling drugs.

On this side of the Atlantic we are no less traders than our brethren on the other side, but we are making far more strenuous efforts than they to be recognized as members of a profession. It is doubtful if we are any more entitled than they to be so considered. Indeed, it will not be many years before we shall be less entitled than they, if our colleges do not insist upon a higher grade of general education before matriculation; already, both in Great Britain and Canada, they are becoming more exacting than we in this particular.

I am an advocate for a more liberal scientific education of pharmacists, believing that it is only as we are superior in attainments to the average storekeeper that we can retain our hold upon the public, and claim from them the respect that is due to the profession of pharmacy; but at the same time I recognize the importance of a careful attention to the business end of the druggist's calling. The mere fact that we deal in drugs—that is to say, in goods which have such a slow sale that their very name is indicative of unsalableness—the mere fact, I say, that we deal in drugs, predisposes us to rest in undue content while we see the same old goods standing on our shelves from month to month, if not from year to year, with but little sale.

Had we been trained to handle other merchandise, we should chafe at the sight and take some steps to get rid of the dead stock which we now hold on to so complacently. My attention was brought to this matter a few days ago by the necessity of making arrangements to place a new line of goods in some convenient part of the store. The idea naturally suggested itself to me to remove some of the dead stock to a less convenient part of the store; and when about to select the goods in question, I looked around to see what line of goods had the smallest sale in proportion to the room they occupied. It will, I am sure, surprise some of our members when I tell them that the articles that could with the greatest convenience be placed in a back room, where they would only be called for a few times in each month, were some of our oldest and staunchest friends, those which we have looked upon from our boyhood as the main source of the druggist's profit, namely, the pharmaceuticals and the crude and powdered drugs. Herbs have already long since been relegated to the privacy of the closet or store-room, but it seems almost a sacrilege to think that if a live business man should for a time take possession of a drug store, he might lay his unconsecrated hand upon the shop bottles

containing powdered drugs, syrups, tincture and fluid extracts, and consign them to a subordinate place. One of the first provisions we make in fitting up our stores is for a certain amount of wide-mouthed bottles containing powdered drugs and chemicals. Many of these chemicals retain their hold upon the profession and are still used with sufficient frequency to warrant their retention on the front shelves, but powdered drugs are very little used and could just as well be in the back room. As for syrups, a few are used at the prescription counter, but how many of them are sold at retail? Where is the sense, therefore, in allowing them to occupy a prominent place in the store? Why not keep them behind the prescription counter, where they properly belong? The same may be said of tinctures. Any druggist can count on his fingers the number of tinctures which he is called upon to sell with any frequency. The rest, like the syrups, belong to the prescription counter. But even for this purpose they have been almost entirely superseded by fluid extracts, which in turn are rapidly giving place to the alkaloidal other active principles and the various forms in which concentration and convenience of dosage are provided.

Any pharmacist who will take the trouble to note the quantity of all the pharmaceutical preparations which he makes, with the date of their manufacture, will be surprised to find how seldom he makes such preparations as the tinctures of kino, columbo, cubeb, hyoscyamus, rhubarb, and twenty other tinctures that might be named. If he will note the value of all the tinctures in his store, and also note the amount of the same which he sells each month, he will come to the conclusion that about the dearest stock in his whole establishment is found in his tincture bottles.

I have thought this matter of sufficient importance to invite the attention of our members to it, and more particularly of the younger ones. If the conclusion at which I have arrived be correct, it is manifest that most of our stores are arranged to suit the business that was carried on a generation ago, and that the modern drug store should have fixtures and arrangements widely different. Indeed, were I to fit up a new store at the present time it would be altogether unlike any drug store I have ever seen, for I should make ample provision for many articles that are now crowded away in closets without sufficient room for convenient handling, and should reduce the space allotted to galenical preparations and powdered drugs to at least one-half of what they now occupy.

The question may be asked, if these galenical preparations, crude and powdered drugs, deserve to be assigned to such a subordinate position in a drug store, what preparations should take their place? This question must be answered by each man according to the business which he is doing; but, in a general way, I would suggest that many of the goods which we sell are unduly crowded in our cases and closets, lacking proper display, and so meeting with smaller sales than they would have in a better advantage. The newer pharmaceuticals, such as gelatin and sugar coated pills, tablet titurates, hypodermic tablets, various forms of suppositories, bougies, etc., should be more conveniently placed, and even displayed. Much more room should be given to the storing and displaying of atomizers, syringes, inhalers, and all the modern appliances for medication. The pharmacists own preparations—legitimate pharma-

ceuticals, not quack medicines—should be displayed so as to attract attention and secure sales.

It is not necessary that I should pursue this matter further. My intention in preparing this paper was simply to call attention to the fact that times are changing, and in a certain sense we should change with them. Many remedies highly esteemed thirty years ago are fast going out of use; new remedies, and new forms of administering old ones, have come into use, and if we would keep up the business end of our calling as other traders do we should keep the new articles to the front, at least to a sufficient extent to show the public that we have new goods and that we are live business men. Having done this, I content myself with leaving this stray thought chiefly for the benefit of the younger members of our body.

[At the close of Professor Searby's paper the president remarked: "I was surprised the other day when a gentleman came into my place of business and called for Helmbold's Rose Wash, or Helmbold's Buchu, put up in the old style. I told him I had none. He said he would buy what I had, and give me a good price. Later he told me he had succeeded in buying some, and sold the proprietary stamp for \$16. Some time after the war the Government issued a large number of revenue stamps for proprietary medicines, toilet articles, etc. Some fifty or sixty of the proprietary medicines had special stamps, and these are very valuable. They have a regular catalogue price. Anything over four cents is worth considerable money. I allude only to the Government proprietary stamp."]

Explosive Mixtures.

BY SGANARELLE.

We are so frequently in receipt of complaints from our readers relating to explosions of mixtures that we think a few notes on some of the more frequently prescribed dangerous compounds may be of service.

POTASSIUM CHLORATE.—This is probably more often the cause of explosion than any other chemical which is handled by pharmacists. It should never be mixed in the powdered state with *organic substances*; even in very small traces in "saline" it is apt, after a time, if all the ingredients and the containing bottle is not absolutely dry, to burst the bottle and violently scatter the contents. It should never be mixed dry with *tannin*. Occasionally a gargle is ordered containing these ingredients; they should always be dissolved separately. *Hypophosphites* and chlorate similarly explode when mixed in the dry state. Chlorate of potassium and *glycerin* alone should never be dispensed, nor should it be combined with *sulphur* or the metallic sulphides.

PERMANGANATE OF POTASSIUM is another source of danger, for the same reason as chlorate, it so readily gives up its oxygen; consequently, it should not be mixed with any organic bodies, such as *sugar* or *glycerin*, nor with *spirit of wine* or spirituous preparations. When ordered in the form of pills, it should be massed with kaolin and petrolatum.

GLYCERIN, in addition to the cases above mentioned, should not be combined with chromic acid; nor with *borax* together with *alkaline carbonates*.

TURPENTINES AND VOLATILE OILS CONTAINING TERPENES should not be combined with *strong mineral acids*, nor with *iodine* or *bromine*.

IODINE should never be mixed in the free state with any preparations containing free ammonia, especially when combined with fatty matter.

OXIDE OF SILVER, sometimes ordered in the pillular form, should be massed with kaolin and petrolatum, and no chloride combined with it.

SPIRIT OF NITROUS ETHER frequently becomes very acid in keeping; in this state, when mixed with carbonates or bicarbonates, it liberates carbonic anhydride, and, if tightly corked, the bottle is frequently burst. Such a mixture should not be corked immediately after mixing. Excess of acid in the nitre may be removed by keeping a large crystal of sodium bicarbonate in the stock bottle, occasionally easing the stopper.—*British and Colonial Druggist*.

Shellac.

The features that make shellac varnish so suitable for foundation work are its quick drying properties, enabling it to dry on the surface of the work without sinking in, as a slower drying varnish necessarily would do, and thus be to a large extent lost; and next, its extraordinary tenacity to the surface below, and its affinity for the oil varnish usually placed over it. These qualities render it the only economical and perfect reliable first coating or priming varnish. Shellac is the generic name, popularly used, in speaking of the different forms of this gum. This is a mistake, however, as in the beginning it is known as lac or sticklac, and is the resinous exudation caused by the puncture of the coccus laccii upon the branches of certain trees—the ficus religiosa, or peppel tree, the croton lacciferan or bihar tree, the butea frondosa, and others which are found in several of the central and north-western provinces of India. This resinous exudation assumes the form of a crust encircling the twigs or extreme branches, sometimes to a thickness of upwards of half an inch. These twigs encircled with this substance constitute the sticklac of commerce. Certain localities produce finer grades of lac than others, and favorable or unfavorable seasons affect the crop as they would any other crop. There is a proper time for collecting this resinous incrustation also, a time when the coloring matter is at the minimum, and in order to get lac that will yield the finest grades of shellac this period must be carefully watched. As there are two evolutions of the insect annually, so there are two crops—one in March and the other in October. Occasionally, when the trees become exhausted, artificial propagation is resorted to. This is done by cutting twigs of the old trees and attaching them to fresh ones. Frequently, too, the insects are transferred by the feet of birds. The center of the shellac industry is Calcutta, where the sticklac is taken and ground into small pieces about the size of rice; it is then winnowed to free it from bark and seeds that have been detached by the process of grinding, and is now known as seed lac. The next operation is to remove the coloring matter of lac dye, which is done by adding water to the seed lac in earthen pans, the seed lac being kept

agitated by women with their feet, much after the old-fashioned Scotch washing. The color is precipitated from the aqueous solution with lime and pressed into cakes, and is the lac dye of commerce. The gum is now dried, and again sifted and put into long, sausage-shaped bags, made of cloth. These are heated over a fire and the gum strained. Either by dextrous manipulation on the part of the natives, or by modern machinery of the European manufacturers, the strained gum, while hot, is formed at will into shellac, button lac, or short lac. The different brands are known by letters, which are the marks of the respective factories or packers, the most popular mark or brand being "D.C.," which is the product of the pioneer European factory.

Medical Notes.

The Constipation accompanying gout is best treated by the administration of colocynth, says Prof. Hare.

Consumption is believed by Dr. S. Solis-Cohen to be curable in the great majority of cases, if the patients are in a position to conform their mode of living to the required conditions.

Thermodin as an Antithermic.—Dr. Schmitt (*Sem. Med.*, 1894; XIV; p. 219) reports to have proved, by experimental and clinical researches, that thermodin is perfectly innocuous; it produces no gastric disturbance, cyanosis, or collapse, but, sometimes, sweats, or chills, which are, however, very slight. After a dose of 60 centigrammes (10 grn.) the abatement of the temperature hardly exceeds 0.9° C (1.6 F); after doses of 1 gramme (15 grn.), the average remission is 1.4° C (2.5 F). These effects, which, the author states, are obtained in influenza, tuberculosis, etc., are slowly produced but are durable.

Analgen in Influenza.—Fifteen patients suffering from influenza were treated by Dr. Golinier (*Aerzt. Parkt.*, 1894; VII; p. 362), with 0.5 grm. (7.5 grn.) doses of analgen every evening and morning until the nervous disturbances markedly receded. Only in very obstinate cases was the dose increased to 1 grm. A striking improvement is said to have occurred as early as on the second day, so that, in the author's opinion, analgen is an excellent nervine in influenza. Unpleasant by-effects were not observed; there were no respiratory or circulatory disturbances occasioned. The urine showed, after the use of ¼ gme. of analgen, the well-known intense reddish-yellow to red coloration. As regards the proper dosage of analgen, the author states that the smallest single dose for adults is 0.5 gme. (7½ grn.), and the maximum, 1 gme. (15 grn.); the daily dose should not exceed 3 gme. (45 grn.).

Carbolic Acid and Chloroform in Enteric Fever.—Dr. R. Quill of the Indian Medical Service reports (*Lancet*) very favorable results from the use of the following combination:

Pure carbolic acid.....	M xxxvi
Spirit of chloroform.....	3 ij
Compound tincture of cardamom...	3 ij
Syrup.....	3 ij
Chloroform water, sufficient to make.	℥ xii

M. Sig. One ounce with an equal quantity of iced water every two hours as directed.

The treatment, if the case was admitted during the first week, consisted in the administration of three grains of calomel at bed-time, thrice repeated. Five doses of the mixture should be given every second hour on the first day, seven doses on the second day, ten doses on the third and following days, until a distinct improvement is observed in the general condition of the patient, with a fall of temperature. The doses then to be gradually reduced to seven, five, and three in the twenty-four hours, until the medicine is finally abandoned. If the mixture is given three to five times a day for a week after the temperature is reduced to normal, a relapse is not so apt to occur as when this is not done. The carbolic acid did not cause any ill-effects, although one patient took as much as two ounces, and another, one and a half.

Treatment of Mumps.—During a recent epidemic of mumps among soldiers, Dr. A. Martin (*Sem. Méd.*, 1894, xiv., p. 172) successfully resorted to the following treatment: From the outset he instituted buccal antiseptics, which, when rigorously done, according to his observations, diminishes the chances of testicular complication. He therefore had his patients gargle and cleanse the mouth as often as possible with solutions of thymol, carbolic acid, or very hot 4 per cent. boric-acid solution. Besides, during the first days of the disease he administered antipyrine in daily doses of 2-3 grammes (30-45 grains). This, he states, more rapidly effects the resolution of the inflammatory process than do sodium salicylate and other remedies; moreover, it acts more promptly on the fever and pain. In orchitis caused by mumps, pilocarpine subcutaneously in doses of 1 centigramme (¼ grain), repeated once daily, is said to have promptly diminished the pain from the first evening on, and to have lowered the temperature, which became normal on the third day. The swelling of the testicle disappeared between the eighth and tenth days. After the acute period of orchitis was passed, the patient was submitted to a tonic treatment (cod-liver oil, nux vomica, cinchona extract, meat-powder, sulphur baths, etc.) for the purpose of preventing testicular atrophy.

Bottger-Almen's Method for Determination of Glucose in Urine. Dr. A. Daiber considers this the most satisfactory method now in use. The reagent employed is made as follows:

Sodio potassic tartrate.....4 grammes [1 drachm]
Soda solution, 8 per cent.....100 grammes [3 fl. oz.]

Bismuth subnitrate a sufficient quantity. Warm the solution and add the bismuth salt to the point of saturation.

About 20 drops of this reagent are added to 10 Cc. (about 2½ fl. drs.) of the urine to be examined, and the liquid is boiled for several minutes. If there is glucose in the urine, a dark yellow or yellowish-brown color will appear at first, which gradually darkens and finally becomes black and opaque. In case a minute quantity of sugar be present, the urine does not turn black,

but merely darkens. This bismuth test, as easy in application as it is simple, is very delicate, and will show reaction in urines containing but 0.05 per cent. glucose. Uric acid, kreatinin, mucus, and very small quantities of albumin do not react with this bismuth solution. Larger amounts of albumin produce, however, by the blackening of bismuth, an illusion avoidable by previous coagulation of the albumin. The presence of indoxyl-sulphuric acid—the so-called indican—is a disturbing factor in this reaction. When it is present more abundantly (which fact need, by no means, to be of any pathological significance), the capacity of reduction imparted to the urine will be vigorous enough to reduce the bismuth solution most energetically. The author enjoins, therefore, all those who investigate glucose with a bismuth solution, and have no polarizer, not to omit the fermenting test, if a reliable test is wanted. The presence of indican may readily be ascertained according to Jaffe's test, —HCl+urine+chloroform.

It remains to be mentioned that the uro-chloralic acid developed after chloral medication, also possesses a reduction power.

Growing Pains.—Growing pains, defined as pains in the limbs, caused by, and during rapid growth, and sometimes so severe as to give rise to growing fever, have been diagnosed by P. B. Bennie, M.D. (*Arch. of Ped.*, Vol. xi; 1894; p. 337), less and less frequently as the years rolled by, until the vanishing point was reached. Cases which have been classed together under this name are the following:

Myalgia from fatigue. This is the commonest variety, usually about the knees and ankles after unusual exertion. They are probably due to auto-infection brought about by excessive production of effete materials in the blood and their inefficient elimination. Elevation of the limbs and rubbing with the palm of the hand in a direction toward the heart relieving venous stasis and facilitating a supply of healthy blood to the exhausted muscles, promptly relieves the pain.

Rheumatism. This is second if not first in frequency. There is slight pain in the joints, little or no swelling and very mild fever, and hence the true cause is not recognized, but rheumatic endocarditis frequently develops in these cases.

Diseases of joints and bones of the lower extremities. Cases of hip-joint disease and suppurative epiphysitis of the upper end of the fibula diagnosed by the laity and allowed to go on untreated are related under this heading.

Fevers, accompanied by pains in the limbs, in one instance proving to be inception of typhoid fever, constitute this class.

Adenitis. Here again the mother still supposes that the lad of 16 years suffered from "growing pains," but he was treated for gonorrhoea and a sympathetic bubo.

The malady "growing pains" with its frequent concomitant growing fever, like its congener disorders of dentition, as a separate morbid entity exists now principally as an article of faith. The

complaint still maintains, however a strong hold of the lay mind and forms an extremely common lay diagnosis which is often the cause of much suffering and even death by leading to the neglect of curative measures at a time when they are most effective.

Salipyrin.

From the *Medical Record's* cabled report of the Eleventh International Medical Congress (Rome, March 29 to April 5), Section on Practical Medicine, we quote: Dr. Arthur Henning, of Königsberg, read a paper on this drug, which he believed to be the best anti-rheumatic and anti-neuralgic yet known, and also a most excellent antipyretic, especially in pediatric practice. In cases of rheumatism, when given in the early stages, it is most efficacious in relieving the pain and reducing the swelling of the affected parts. In simple colds and acute coryza it exerts a very favorable influence upon the headache and general malaise. Its action in influenza must be regarded as almost specific. In cases of uterine hemorrhage, not due to the presence of tumors, or occurring in childbirth, salipyrin is much more efficacious than any other known remedy. The drug is absolutely safe, and gives rise to no unpleasant after-effects. It is best given in the afternoon, in rather large doses, repeated at short intervals. The total daily dose ranges from $7\frac{1}{2}$ grains to 2 drachms, according to the age of the patient and the disease. The remedy has no cumulative effect, nor do those taking it acquire a habit.

A Contribution to the Study of Piperazine.

Dr. John Gordon, Professor of Materia Medica, University of Aberdeen, recently undertook a systematic study "to ascertain the solvent action of piperazine on uric acid," the expenses connected with the investigation being defrayed by the Scientific Grants Committee of the British Medical Association. Schering's piperazine was employed, Prof. Alexander Ogston furnished the supplies of calculi, and the investigation was made in the pharmacological laboratory of Prof. John Theodore Cash, F. R. S. The full report is published in the *British Medical Journal*, June 16, 1894, and is an important and highly interesting contribution, which will give the therapeutic adoption of piperazine a decided stimulus.

Dr. Gordon concludes his report with the following succinct summary:

As the result of numerous experiments on artificial uric acid, and also on uric acid which was collected from urine which had been treated with hydrochloride acid, it was found that piperazine was capable of dissolving almost its own weight in urine, after the phosphates had been removed; but when stronger solutions than 2.5 per cent. were employed, an insoluble precipitate formed.

SUMMARY OF RESULTS.

1. Piperazine is not wholly oxidized in the body, and may be detected in the urine of those to whom it is exhibited.
2. Piperazine in solution of 1 per cent. in normal urine, when kept in contact at a temperature of 39° C. (body temperature) for a given time, has the property of dissolving to a great extent a fragment of a uric acid calculus.

3. That the stronger the solution of piperazine in urine (up to 7.5 per cent.) the earlier did the solvent action begin, and the more rapid the completion.

4. That, notwithstanding this, with the stronger solutions of piperazine in urine, the rate of solubility was not so markedly rapid over the weaker solution as might be expected.

5. That the solvent action of piperazine in similar circumstances was greater than any other of the substances that were employed, viz., borax, lithium citrate, sodium carbonate and potassium citrate.

6. That piperazine, in weak and strong solutions in urine, converted the undissolved portion of the calculus into a soft granular or pulpy condition.

7. That neither borax, lithium citrate, sodium carbonate, nor potassium citrate in similar circumstances rendered the fragment of calculus soft or pulpy.

The report is made up in part by comparative tables of experiments, and these with the elucidating text form a complete and conclusive argument in favor of piperazine as an invaluable therapeutic agent in uric acid diathesis.

Medicine as Practiced by the Lower Animals.

It would seem as if man were surrounded by danger, seen and unseen, throughout his entire life. From the cradle to the grave it is a struggle. In the vegetable kingdom also the same struggle for existence is seen. Every flower has its destroying insect; for every shrub there is a worm, and for the ripening water melon the little colored boy flies in wait. But if disease threatens man on every hand, equally close at hand is the remedy with healing power, and not only do these so-called inferior human races appear to recognize this, but even dumb animals, and it would seem as if the latter in an empirical way, of course, practiced medicine.

Animals instinctively choose such food as is best suited to them, and to a certain extent the human race also shows this instinct, and medical men are sometimes at fault in not paying sufficient respect to the likes and dislikes of their patients. Women, as a rule, are more often hungry than men, and they do not like the same kinds of food; nevertheless, men and women are generally put on precisely the same regimen, especially in public institutions. Infants scarcely weaned are given a diet suitable to adults, which they dislike, and which disagrees with them. Some years ago Delaunay investigated this question in the different asylums of Paris, and ascertained that children, although they will generally eat it, do not like meat before they are about five years of age. People who like salt, vinegar, etc., may generally be allowed to satisfy their tastes with moderation. Lorain always taught that, with regard to food, people's likings are the best guide.

A large number of animals, such as elephants, stags, birds, and ants, wash themselves and bathe. Delaunay lays down as a general rule that there is not a species of animals which voluntarily runs the risk of inhaling emanations arising from their own excrement.

If we turn to the question of reproduction, we find that all mammals suckle their young, keep them clean, wean them at the proper time, and educate them—maternal instincts which are frequently wanting or rudimentary in women even of civilized nations. In fact, man may often take a lesson in hygiene from the lower animals. Animals get rid of their

parasites by using dust, mud, clay, etc. Those suffering from fever restrict their diet, keep quiet, seek darkness and airy places, drink water and sometimes even plunge into it.

When a dog has lost its appetite, it eats that species of grass known as dog's grass (*chiendent*), which acts as an emetic and purgative. Cats also eat grass. Sheep and cows, when ill, seek out certain herbs. When dogs are constipated they eat fatty substances, such as oils and butter, with avidity. The same instinct is observed among horses. An animal suffering from chronic rheumatism always keeps as far as possible in the sun. The warrior ants have regularly organized ambulances. Latreille cut the antennæ of an ant, and other ants came and covered the wounded part with a transparent fluid secreted from their mouths. If a chimpanzee be wounded, it stops the bleeding by placing its hand on the wound or dressing it with leaves and grass. When an animal has a wounded leg or arm hanging on, it completes the amputation by means of its teeth.

What Gladstone Thinks of Doctors.

At a meeting held in London a few weeks since, for the purpose of creating some fitting memorial of the life and work of Sir Andrew Clark, Mr. Gladstone was the chief speaker. Among other appropriate things, he said:

The profession itself is one with regard to which it is impossible, I think, not to be conscious that its position in our generation, and in some generations previous, has been a position continually advancing and continually widening. The other learned professions undoubtedly had a start of the medical profession. Four or five hundred years ago property was of more worth than human life, and physicians were little heard of. But the position of the medical profession to-day is becoming one of vital and commanding interest to the whole of society, and I anticipate that that interest must continue. "While wealth increases, while inventions and discoveries increase, wants will increase and enjoyments will increase; and in connection with those wants and enjoyments there will, I fear, be a corresponding increase of infirmity and disease, and the medical profession braces itself to grapple with the situation which has been created, and continually advances in knowledge, credit and importance. My own life has been long enough to enable me to witness, and in some degree to measure, the change that has taken place. I have had the good fortune of knowing many eminent and distinguished men in the profession during the last three-score years, and I have seen also a great change in capacity, in attainments, and in competency to deal with the difficult, the almost insoluble problems that are continually presenting themselves to the mind of the medical man.

It appears to me that it was eminently desirable that, in a time like this, a man such as Sir Andrew Clark should rise to the head of his profession. For, after all, we require something more than knowledge, something more than skill. We require great devotion to the purposes of the profession; and that devotion never, I think, was exemplified in a more remarkable manner than in the career of Sir Andrew Clark. He loved his profession with his whole heart and soul. While engaged in that profession he loved it not only with sincere and cordial but with

chivalrous devotion. We need not say that the age of chivalry is altogether passed so long as we have among us men of the type of Sir Andrew Clark.

I think the profession has done well in taking by common consent Sir Andrew Clark as the typical man, the representative of all that is best and noblest in the profession and its purposes. Others may judge better than I can his scientific ability. What I have seen is his patience, his thoroughness, and his absorption in the care of his patient as if that one case was all with which he had to occupy his mind. I am sure that whatever happens; whatever may have been the past advances of the medical profession, and they are great; whatever may be the future advances of that profession, and they will be greater still, there will never come a time when the profession will not be justly satisfied and glad to have recorded upon its annals a name such as the name of Sir Andrew Clark.

Protection Against Mushroom Poisoning.

Dr. W. P. Gibbons of Alameda, Cal., the chairman of the committee on indigenous botany, materia medica, pharmacy, and medical chemistry of the Medical Society of the State of California, read at the recent meeting of that society a paper entitled "Some of the Poisonous Plants of the Pacific Coast." In that paper he showed that our American mushrooms were much neglected as an article of food and as a substitute for meat, owing to their bad reputation among those who were unable to discriminate between the edible and the noxious species. While, he said, there was no doubt that sickness and death had resulted from eating certain varieties, among the most poisonous of which he classed the *Amanita muscarius*, formerly used as a fly poison, such accidents were to be attributed as a general thing to gathering the mushrooms at an unseasonable time and to neglect of the proper precautions in preparing them for the table rather than to any fixed poisonous principle in the plant. Even the *Amanita muscarius*, he said, was eaten by the Russian peasants after they had prepared it with salt and vinegar. It appears, however, that it is not enough to be able to discriminate between the different varieties of fungi, for mushrooms that are in themselves innocuous are apt to be attacked by flies and other insects which impart poisonous properties to them. Dr. Gibbons showed a small bottle containing minute coleopterous insects and another containing myriads of their larvæ, not distinguishable by the unassisted eye from fine dust. These had been taken from a specimen of *Polyporus*. He concluded by stating that there was no general rule by which edible mushrooms could be distinguished from noxious ones; in all cases they should be well treated with salt and vinegar before being cooked.—*Editorial in N. Y. Medical Journal.*

Bibliography.

GRUNDRISSE DER PHARMACOGNOSIE, von F. A. Flückiger. Zweite, mit Berücksichtigung technisch wichtiger Pflanzen bearbeitete Auflage. Berlin: 1894. R. Gaertner's Verlagsbuchhandlung.*

Flückiger's name and work is probably better known to the English speaking world than that of any other

*Elementary Pharmacognosy, by F. A. Flückiger. Second edition prepared with especial regard to the plants of more importance. Berlin: Published by R. Gaertner, 1894.

living German pharmaceutical writer, a fact which is in large measure due to his collaboration with Handbury in the writing of "Pharmacographia," though this alone would not have given him the high place which he holds in the estimation of the English and the Americans.

His most excellent work *Grundlagen der Pharmaceutischen waaren kunde*, in its revised and enlarged form, was placed before the English student as "the Principles of Pharmacognosy" in the translation by Prof. F. B. Power, and has proven of much value in systematizing the work of the students in learning the principles which underlie the systematic study of pharmacognosy.

Having mastered the "Principles of Pharmacognosy" the student is in a position to take up the *Grundriss der Pharmacognosie* which is more nearly the "ground plan" than the "elements" of pharmacognosy.

In this work, which is a duodecimo volume of some three hundred and odd pages, the author has arranged the more important organic drugs according to their botanical derivation, the comparatively small number of drugs of animal origin rendering any such classification impracticable as applied to them.

For instance, we find first the cryptogamous plants under which come (a) thallophytes and (b) pteridophytes. Next we find phanerogamous plants taken up and treated in the classes and orders to which they belong botanically. To facilitate cross references and comparative work a table of contents is furnished which is based upon the practical or external characteristics or commercial classes of the drugs, and under this we find the names of the various gums, roots, resins, etc., each giving a reference to the location of the subject matter in the body of the work.

The great advances in the technique of pharmacognosy of recent years renders it necessary for one to have special qualifications in that line to thoroughly comprehend all the technical expressions and descriptions used. With a view to widening the field of usefulness of the book, the author has therefore endeavored to avoid the purely scientific, taking up rather the practical aspect of the descriptions, tests, etc., as applied to the drugs treated of. Under the head "constituents," for instance, only those of importance are given those whose presence may be taken for granted, as cellulose, chlorophyll, albumen, starch and sugar, being generally omitted.

For the same reason that technicalities have been as far possible omitted, reference to the microscope and its revelations have been condensed to as little space as possible, and in most cases omitted altogether.

The general method pursued in the treatment resembles considerably that followed by Prof. Maisch in his "Organic Materia Medica," save that where Prof. Maisch gives the therapeutic properties Prof. Flückiger does not give these but does give brief mention of the history of the drug, the latter a thing to be expected in one of the authors of "Pharmacographia."

The similarity of scope and treatment of the work under review and that of the late Prof. Maisch cannot but invite critical comparison. Prof. Flückiger's work is written in smoother and less disjointed manner than Prof. Maisch's, but is still sufficiently concise. The method of classification adopted by Prof. Maisch, namely that founded on external similarities, is we believe preferable, although Prof. Flückiger states that he considers the arrangement by natural orders of most value to the student. (In his "*Pharmakognosie des Pflanzenreiches*," 3 Auflage, Berlin, 1891, Prof. Flückiger uses a similar method of classification to that adopted by Prof. Maisch.)

Prof. Maisch's book has also the great advantage over that under review that it is profusely illustrated, while the "*Grundriss der Pharmakognosie*" is entirely without illustrations.

The volume is a most excellent one as is to be expected, and should serve a valuable purpose to the German student. The appearance of the work at this juncture is particularly interesting in view of the author's presence in America.

A STANDARD DICTIONARY OF THE ENGLISH LANGUAGE upon original plans, etc. Prepared by more than two hundred specialists and other scholars under the supervision of Isaac K. Funk, D.D., Editor-in-Chief, Francis A. March, L.L.D., L.H.D., Consulting Editor, Daniel S. Gregory, D.D., Managing Editor, and Arthur E. Bostwick, Ph.D., John Derrickson Champlin, M.A., and Rossiter Johnson, Ph.D., L.L.D. Volume 1, A. to L. New York: Funk & Wagnall's Company, 1893.

This work combines in as high a degree as seems possible the advantages of the condensed arrangement of the old-style lexicon with that of the modern encyclopedic dictionary. By grouping the compound words under their respective roots, and giving to the roots themselves the fullest definition, it becomes possible to define the compound words very tersely yet very clearly, and thus to effect much economy of space. The work is especially rich in definitions of the vast number of technical words which have come into use in electrical science. It is a marvellously well conceived and well executed piece of lexicography, the scope and value of which it is difficult to realize save after constant use and careful study.

THE TANNINS. A monograph on the history, preparation, properties, methods of estimation, and uses of the vegetable astringents, with an index to the literature of the subject. By Henry Trimble, Ph.M., Professor of Analytical Chemistry in the Philadelphia College of Pharmacy, Vol. II. Price, \$2. Philadelphia: J. B. Lippincott Company, 1894.

The second volume of this work is a worthy successor to that which preceded it, and reflects credit upon the ability of the author both as an original investigator and as an editor. The thoroughness and accuracy of the work in these two volumes leaves nothing to be desired.

FIFTH ANNUAL REPORT OF THE MISSOURI BOTANICAL GARDEN. St. Louis, Mo.: Published by the board of trustees, 1894.

This volume is unusually attractive, containing upwards of 40 handsome plates of exceptional value to botanists; its publication is a credit both to the board of trustees of the Missouri Botanical Garden and the city of St. Louis.

"Well bought is half sold." Read the "trade notes" and market review every issue.

Correspondence.

"Observer's" Letter Criticised.

Editor AMERICAN DRUGGIST:

DEAR SIR: The last number of the AMERICAN DRUGGIST just to hand. I have read with interest your remarks on "University Schools," "Ordo Rerum," and Redsecker's proposed act.

What prompts me to drop you these lines in the letter by "Observer," page 349, not that I wish to take a hand in the cutting cure problem, but that letter just reminds me of a little experience of a few Chicago brother druggists. "Observer" says "the American loves a bargain." Three of Chicago's best retailers had some experience throwing rather a queer side light on this assertion. These three large retailers, up to a certain time, had sold a leading article at full retail price. They concluded to make a leader, bought the popular article in gross lots, stacked her up in the show window, and lo! and behold! where a dozen a week had been sold before at full price, not a quarter dozen was sold a month at cut price, and the stock was peddled out to the retailers' friends at "liberal jobbers' discount." I just give this for what it is worth, and not with an idea to discuss the cut rate cure problems. W. BODEMANN.

Chicago, Ill., July 3.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Chemistry Chapter of the Agassiz Association.—F. H. writes for information concerning the above-named society, and we have obtained the following particulars from the secretary, Charles Schumann.

The object of our society is mutual assistance in the study of chemistry by means of correspondence. The members are scattered all over the United States. The "Note-book" circulates monthly, and serves as a club-hall for discussions, questions, etc. Members acquire practice in writing readable articles, and share the results of their studies by submitting brief essays quarterly. These essays are circulated with the note-book and discussed. A systematic course of home study, compiled with the assistance of some of the foremost chemists of the country, is provided by the Chapter for members desiring to avail themselves of its advantages. Members taking up the course are exempt from writing essays if desired. Students receive the aid of several chemists of high standing who are honorary members of the society.

Druggists who are preparing for

board examinations can derive invaluable assistance by taking a one or two year's course of study in chemistry with the C. C. C. (Corresponding Chapter of Chemistry). College students will find the society a pleasant and useful auxiliary. Graduated pharmacists would find it an agreeable medium for the exchange of knowledge and experience.

[Dr. Marcus Benjamin of this city is honorary president of the Chapter. Those of our readers who may desire to become members of the Chapter may address the secretary in care of this journal.—Ed.]

Brown Sequard's Epileptic Mixture. H. C.—The formula for this mixture is as follows:

Ammonia bromide	
Potassii	
Sodii bromide aa.....	3 iiii
Potassii iodidi	
Sodii iodidi aa.....	3 iiii
Ammonia carb.....	3 i
Tinct. calumbe.....	1 iiii
Aque ad ft.....	1 viii

Fulminating Compound.—J. J. W. writes: Please inform me of some formula for making a torpedo-like explosive compound, that can be exploded by throwing it against a resisting object.

Among the substances most commonly employed by the makers of detonating crackers are fulminate of mercury and fulminate of silver. A small particle of the fulminate selected is screwed up in a piece of thin paper, with some fragments of a crushed quartz pebble.

Patent Leather Polish.—C. S. L. sends a sample of patent leather polish, with a request for its formula.

The composition appears to be a solution of yellow wax in turpentine, oil, and lard colored with lamp black.

Artificial Sea Salt.—M. C. asks for a formula for artificial sea salt.

A very good substitute for the genuine article is obtained as follows:

	Parts
Sodium chloride.....	100
Magnesium chloride.....	110
Calcium chloride.....	20
Magnesium sulphate.....	60
Potassium iodide.....	2
Potassium bromide.....	3

We think, however, that M. C. will find it more satisfactory to procure the natural sea salt from dealers in that article, as it is cheaper to purchase the salt than to manufacture it.

To Transfer Photographs.—R. R. W. asks for directions for transferring photographs from card on to glass.

Prepare the glass by coating its surface with dammar varnish; when the varnish is nearly firm and dry, place the previously wetted photograph carefully on it face down and rub it on, excluding air bubbles.

Lemon Kali.—L. S. C. This is a sweetened mixture of tartaric acid and bicarbonate of soda flavored with oil of lemon. It is much used in England and Scotland as a cheap substitute for lemonade. It is also largely employed by pharmacists in the countries named for the extemporaneous preparation of carbonated beverages. English pharmacists are not yet alive to the advantages of the soda fountain, and are still content to get along with bottled waters, so that when a customer de-

mands an effervescing sarsaparilla—for instance, they either uncork a bottle of the beverage and serve it as we would ginger ale, or they half fill a glass with plain water, add about an ounce of a syrupy decoction of sarsaparilla, and plunging a heaping deserts spoonful of lemon kali into the mixture start a brisk effervescence, and serve while effervescing. This is flavored soda water, as it is understood in England.

Lemon Kali is usually made as follows:

Sodium bicarbonate.....	4 ounces
Tartaric acid.....	4½ ounces
Powdered sugar.....	16 ounces
Oil of lemon.....	10 min.

Rub the oil with the sugar until entirely taken up; then thoroughly incorporate the other ingredients, and pass the whole through a fine sieve.

Adhatoda Varica.—L. L. C. writes: "Adhatoda varica: a leaf, used to drive away flies either by odor or otherwise. Said to be obtainable through Parke, Davis & Co., though I find no mention of it in their catalogue.

"What sort of a leaf is it?—what country, natural order, and how does it act?"

This must be the *Justicia adhatoda* of Linnaeus, an East Indian species of the Malabar nut tree (or shrub) belonging to the Nat., ord. *Justiciæ*. The leaf is aromatic and bitter. It is used by the natives in conjunction with other remedies as an anthelmintic, and their juice combined with that of fresh ginger in coughs, asthma and ague.

Injection Brou.—F. L.—This is stated to have the following composition:

Opium.....	15 grains
Catechu ss.....	30 grains
Saffron (Valencia).....	4½ fl. ounces
Water, enough to make.....	

Macerate for several hours, then strain and dissolve in the liquid:

Lead acetate.....	45 grains
Zinc sulphate.....	90 grains

Children's Tooth Powder.—C. H. asks for a formula for a safe children's tooth powder.

Next to camphorated chalk, which is the dentifrice best adapted for young persons and children, the following can be recommended:

Powd. cinchona.....	3 ii
Potass. chlorate.....	3 ss
Powdered orris.....	3 ss
Precipitated chalk.....	3 i
Oil of rose, sufficient to perfume.	

Mix and pass through a No. 80 sieve.

Imitation Raspberry Syrup.—C. L. B. asks for a formula for artificial raspberry syrup. She mentions that it is desired only for experimental purposes.

It is first necessary to prepare a raspberry essence of flavor and this is made as follows:

Orris root.....	3 ounces
Acetic acid.....	2 ounces
Acetic ether.....	1 ounce
Alcohol.....	20 ounces

Macerate the contused root with the other ingredients for seven days, then filter. In preparing raspberry syrup it is used in the following proportion:

Simple syrup.....	7 pints
Water.....	2½ pints
Tartaric acid.....	2 ounces
Essence of raspberry.....	2 ounces
Cochineal coloring N. F. sufficient to impart the proper tint of color.	

Tutti Frutti.—M. R. writes: I wish a formula for the chewing gum sold as

Tutti Frutti. Can you favor me with a formula?

The words "Tutti Frutti" are the trade-marked property of the concern making that particular kind of chewing gum. The composition of the gum is a trade secret, but it is said a preparation closely resembling it may be made according to the formula given below:

Chicle.....	3¼ pounds
Paraffin wax.....	1 pound
Tolu balsam.....	2 ounces
Peru balsam.....	1 ounce

Dissolve the gum in as much water as it will take up, melt the paraffin, and mix all together. Now take:

Sugar, finely granulated.....	10 pounds
Glucose.....	4 pounds
Water.....	3 pints

Put the sugar and glucose in to the water, dissolve and boil them up to "crack" degree (confectioners' term); pour the syrup over an oiled slab, and turn into it sufficient of the above gum mixture to make it tough and plastic. The flavoring is said to consist of a mixture of powdered spices, but this may be best determined by experiment.

SODA WATER.*

WILLIAM B. THOMPSON, PH. G.

It is noticeable with what persistency we cling to the use of a misnomer when this becomes fixed in the mind. Take that of "soda water," for instance, as applied to the carbonated water, the aerated and the carbonic acid gas held in water, of the druggist's fountain! So fixed an appurtenance of the drug store has this fountain adjunct become that it might be well to attempt, at least, to settle this title accurately and now.

The original soda water was really a medication, a draft of milder alkali to act as a calumative or "settler," or as a corrective of functional disturbance following some indiscreet feat gastronomic. It was merely a solution of bicarbonate of soda, thirty grains in a pint of water. Compared with the sparkle and cooling freshness of the modern draft, it would stand in about the same relation as soap and water to a foaming nectar, or of bubbling champagne to flat beer; and just how it became so mixed in name with its opposite, may be better guessed than understood. "Pulveris Effervescentes" might have fallen in with it somewhere along the line of march, and become mixed in the procession. Mineral water, which does seem more appropriate, though not applicable, was a term long in use. Years ago, before the tap on the counter of the drug store became extended or popular, or even used, Eugene Roussel, then a well-known local manufacturer of aerated waters, established a "salle," or saloon, on Chestnut street, south side, above Third street, for the sale of mineral water on draught. Here, without show or pretense of any kind, over a marble counter, with a sunken basin of still water (perhaps drippings) he drew from one single plain stem the bubbling draught for thirsty hundreds. It was no unusual procedure at that time for Philadelphians to walk a mile or two of summer evenings to be regaled at this perennial fountain of delightful refreshment. Then came the era of mineral waters supplied to order—natural mineral waters bottled at the source, actually so, no doubt, in many cases; but we have had sufficient reason at subsequent times to believe actually

not so in many other instances, and so on. This source of pleasure and means of revenue has become enlarged and expanded to that degree, that the modern (soda) fountain vies in artistic elaboration with the most fanciful creations of the artist in sculpture. Withal, that name of soda is still applied to the effervescent thirst-quencher, that struggles with the restraint of its marble encasement, until it leaps foaming into the goblet of the parched wayfarer and jaded pedestrian. Shall we continue, then, Mr. Editor, to call this delectable thing of such grateful refreshment, "soda water"?

Summer Memoranda for Dispensers.*

BY THOMAS WARWICK:

There are three things which every confectioner should learn to manage—his wife, his mother-in-law and his soda-water counter; and of the three the latter is perhaps the hardest. I have known several cases of men who were able to manage their wives, and I heard of one case of a man who was able to manage his mother-in-law, although this case occurred very long ago and in some foreign country, but I never even heard of the case of a man who managed his soda-water counter in the way that would be necessary for obtaining the best results. There is still ample room for improvement in this respect, even among those who think they have attained perfection.

Of course, it is impossible to say much upon this subject in the limited space at my command, but I wish to touch upon a few of the points which are most commonly overlooked by the dispenser.

To begin with, there is the question of novelty. This applies as much to the apparatus as to the drinks dispensed. Every confectioner is familiar with the fact that while there are a few standard drinks which have a constant sale year in and year out, it is absolutely necessary to offer one or two novelties every season. Even those customers who do not call for the new drinks would leave your store if you did not advertise them. The title of the new drink seems to act upon the fidgetious portion of the population in two ways. In the first place, it attracts them into the store, and, secondly, it makes them feel that you are up to the times. Hence, even though you may sell very few of the novelties, yet it is profitable to keep them on hand, as they increase the sale of the standard drinks.

But a point which is still recognized is the importance of frequently changing the appearance of the dispensing apparatus. A man who has a large trade is apt to imagine that his best plan is to buy a very fine apparatus and then keep this in his establishment for ten or fifteen years; but no greater mistake could be made. With very few exceptions the large bulk of any dispenser's soda water trade is done among a certain number of regular customers, and it is essential that the appearance of the soda water apparatus should not become too familiar to them. Progress of any kind implies change, and if they see no change in your store, they will imagine that you are unprogressive, and will carry their patronage elsewhere. They do not reason the matter out in so many words, but feel it instinctively and act upon this feeling. Hence the wise confectioner will make occasional changes in his soda water counter.

I knew the case of a New Jersey man who used to make it a point to trade his dispensing apparatus for an entirely different one every spring; and although he was obliged to pay a difference of two or three hundred dollars each time he made the exchange, he nevertheless found the plan very profitable.

Of course, with a little ingenuity, it is possible to completely alter the appearance of the counter without buying a new apparatus. The mere change of its position in the store will often produce the same result, or the placing of statuettes or other ornaments around it.

For very large dispensers the question becomes a most difficult one, for it is exceedingly difficult to dispose of some of the mammoth marble structures which are to be found to-day in our large cities. For such, instead of purchasing a single large apparatus, I would recommend getting a number of separate medium sized wall apparatus, with plate-glass mirrors between them. The separate apparatus can then be readily disposed of for new ones of entirely different appearance at a comparatively small outlay.

An important question which arises, with large or even with medium sized apparatus, is how to prevent slopping up the floor behind the counter. I know of no satisfactory method of preventing this, for even if the greatest care be exercised, it is impossible not to wet the floor more or less. But what can and should be done in all establishments, and what is done in the best stores, is to employ some device which will prevent the water from leaking through the ceiling below, and at the same time allow the dispensers to keep their feet dry. The best plan which has come to my notice in this connection is that employed by some of the largest New York stores. They have behind the counter a water-tight lead-covered floor, inclined sufficiently to allow the water to run off into some convenient drain. Wooden racks are placed over the lead, so that the operators need not get their feet wet. These racks are not fastened down in any way, and they can therefore be readily removed when it is desired to sweep the floor. This seems to me about as convenient an arrangement as could be desired, and is withal, not very expensive.

Turning now to the drinks dispensed I wish to say a few words in regard to a drink which, it seems to me, does not receive the attention it deserves, although I must confess that its sale is increasing every year. This is what is known as soda lemonade or lemonade soda. It is really nothing more than the juice of a fresh lemon, mixed with a little simple syrup to sweeten it, and dispensed with a glass of plain soda. Yet it is one of the most healthful and refreshing drinks existing, and with a little judicious pushing its sale could be increased to an enormous extent. The value of lemon juice for refreshing the system is well known, and it is highly recommended by physicians in fevers and similar illnesses. Moreover, the carbonic acid gas itself possesses analogous properties, and the combination of the two makes an ideal summer drink. Consequently, if the confectioner is careful not to sweeten it too much, but to be sparing in the use of his simple syrup he will produce a drink that will quench the most insatiable thirst, and this is what few drinks will do. Most of the syruped soda waters, far from quenching thirst, really increase the thirst, but a well made soda lemonade goes to the right spot; and if people only realized this fact the sales of this beverage would increase to an astonishing extent. It is almost unneces-

sary to add that the lemons should be perfectly fresh. A good way to keep lemons is to wrap them separately in tissue paper and suspend them in open wire baskets. A wooden or preferably a glass lemon squeezer should be used. Galvanized iron lemon squeezers should be, by all means, avoided, as the citric acid of the lemon forms poisonous compounds with the zinc. Porcelain lemon squeezers are good if the porcelain is not glazed with lead, which is, however, too often the case.

Another point which deserves mention is that of courtesy toward customers. There are a great many disagreeable people in this world, and they will often say or do things which are apt to irritate the confectioner's feelings, but he should school himself to avoid taking any notice of such rudeness. I do not wish to be understood as saying that a tradesman should be obsequious, or that he should lack proper self-respect; but the mere fact that a customer is impudent or uneducated and says disagreeable things is no reason why the salesman should make a sharp or sarcastic retort. Remember that you are not responsible for the education of your customers, and that if they are badly brought up it is no fault of yours. But if you forget you are a gentleman, and try to answer sarcasm with sarcasm, you do no good whatever, and you lose a certain portion of your self-respect.

This question is often brought forcibly to my notice at the soda water counter. It is a wide-spread belief among the soda water drinking public that the dispenser, in order to make a large profit, draws each glassful of the beverage with as much foam as possible, in order to sell froth instead of soda water. There are, accordingly, quite a number of fair damsels who make it a point, after a glassful of the beverage has been served them, to let it stand on the counter until the froth settles in the hope of having it filled up again. The wise dispenser in all such cases will do well to make the best of a bad matter and refill the tumbler without waiting to be asked to do it. Of course, this acquiescence encourages the habit, but it pleases the customer, and the extra amount of soda water required is inappreciable.

I last summer witnessed an obstinate case of this kind, which I think worth recording, in the hope that other dispensers may profit by it. A young man had called for a glass of soda water, and when it was served out to him he let it stand awhile until the foam had settled. As the dispenser was industriously looking out of the window in order not to observe the diminution, the young man called to him, asking him to fill up the glass. Not caring to refuse, the knight of the draught arm acquiesced, but he had struck a tough customer, for the young man, instead of quaffing the beverage, let it stand again a few minutes and then coolly asked to fill up a second time.

This was too much for the dispenser, who curtly replied that he couldn't give three glasses of soda-water for five cents.

"Oh, never mind that," replied the customer. "I'm willing to pay ten or fifteen cents to get a good glassful."

"Well, even so, I can't do it," returned the confectioner, "for it's against our rules to take more than five cents for each glassful."

The angry customer dropped a dime on the counter and went out without touching the soda-water, but he never set foot in that store again.

The majority of the people who were in the store at the time sympathized with

the dispenser, and he really could not be blamed for his conduct. But I, nevertheless, felt that he had made a mistake in refusing to fill up the tumbler again. There are fortunately not many such disagreeable customers, and it seems to me better to be willing to lose something on these than to have any unpleasantness arise in the establishment. If the same man repeats the practice too often it is time then to try to put a stop to the matter; but it is well to endure such things as long as possible.

In recommending this course it is not the mere question of profit that is to be considered, for the rule does not apply only to a tradesman selling goods, but in all branches of public and private life. The rule is this: "Never be too quick to take an offense, and always try to be conciliating in manner, even if you have to sacrifice some of your own rights and liberties." Life will be much pleasanter and you will, curiously enough, get more than the man who is all the time claiming his full share, and who always shows fight at the least infringement of his rights.

In concluding this article I wish to give advice in regard to two other points. The first is to use side-opening cocks on your portable fountains. The top-opening cocks are more apt to break off, but, above all things, they are more difficult to get under the counter, and the counter requires to be made higher. Hence the side-opening cocks are greatly to be preferred.

Secondly, I would advise all dispensers, except in the very smallest establishments, to use what is known as a multiple valve or duplex cock. This is a device by means of which an empty fountain may be shut off and a full one turned on without an instant's delay, and without having to dive under the counter. The mere turning of a stop cock accomplishes the desired result.

Contracts in Restraint of Trade.

In purchasing the good will of an established business it is the general rule to include a provision that the seller shall not engage in the same or similar business within the territory covered by the business sold. This is a fair contract, and if properly made, an entirely valid one; but it is somewhat technical in nature, and may very easily be rendered invalid by reason of the introduction of stipulations which the law regards as unconscionable, and therefore void.

The general rule is that all restraints of trade, which the law so much abhors, if they are pure and simple restraints of trade, unqualified and unlimited, and without a special and valid consideration, are bad, and will not be enforced. Any agreement in general restraint of trade is void and illegal. The law will not permit a man to enter into a contract which will wholly deprive him of his established means of livelihood, and take his producing capacity out of the general fund of the community. To permit this would be to encourage inactivity, stifle competition, restrict production and increase poverty. Any contract therefore by which a man agrees not to employ his industry, his talents or his capital in any useful vocation or business is void, unless it is limited either as to time or place, and is entered into for a valid consideration.

It frequently happens that individual interest and general convenience render engagements not to carry on trade, or to

act in a profession in a particular place, proper. Upon this phase of the question a great many cases have arisen out of the sale of an established business, and not a few out of contracts of employment. It frequently happens that a merchant desires to employ a salesman, upon condition that he will not enter the same business on his own account, or enter the service of a competitor. Properly limited this species of contract is valid. If the contract is that the employee shall not do these things within a specified time, and the time is reasonable, or that he shall not do them within the territory covered by the employer's trade, the agreement, if upon a proper consideration, is valid and binding.

In addition to requiring that the restraint must be partial and founded upon consideration, the agreement must be reasonable. The best test of the reasonableness of such an agreement is whether the restraint is such only as to afford a fair protection to the interest of the party in favor of whom it is given, and not so large as to interfere with the interests of the public. Whatever restraint is larger than the necessary protection of the party can be of no benefit to either; it can only be oppressive, and if oppressive it is in the eye of the law unreasonable. Whatever is injurious to the interest of the public is void, on the grounds of public policy, and no certain precise boundary within which the restraint would be reasonable, and beyond which excessive, can be laid down.

Contracts for the partial restraint of trade are in fact in many cases beneficial to the public; and in the case of the tradesman selling his shop with a contract not to carry on the trade in the same place, which is in effect the sale of a good will, which offers an encouragement to trade by allowing a party to dispose of all the fruits of his industry, and also that of a manufacturer or professional man taking an assistant into his service with a stipulation that he shall not carry on the same business within certain limits. In such a case the public derives an advantage in the unrestrained choice which such a stipulation gives to the employer of able assistants, and the security which it affords that the employer will not withhold from the employee instruction in the secrets of his trade and the communication of his own skill and experience, from the fear of his afterward having a rival in the same business. If the law discouraged such agreements as these employers would be extremely scrupulous as to engaging employees in a confidential capacity, seeing that such employees might incur the risk of taking advantage of the knowledge they acquired of their customers and their mode of conducting business, and then transferring their services to a rival trader.

It is highly important that persons like a commercial traveler should be able to enter into contracts of this sort, which afford some security to their employers that the knowledge acquired in their service will not be used to their prejudice. Under the same head as contracts in restraint of trade may be classed those by which the services of individuals are secured for a specified time, or for life, to a particular employer. There seems to be no objection to such contracts, even when they extend over the whole period of the life of the employee, though in some countries a restraint so extensive has been considered inconsistent with individual liberty, and accordingly forbidden. The question, however, appears to have been long ago settled in our law without regard to considerations which seem to embrace a shadow.—*American Stationer.*

Microscopical Manipulation.

Snowflake Pictures.—Anthony's *Bulletin* says that a Mr. Sigson has photographed snowflakes as follows: A Zeiss microscope, fitted to a long camera, was placed at a considerable angle in the attic of a house, near to the window. To gather the flakes separately, a thick cloth was laid in that part of the window where but few flakes fell. After selecting a flake by the aid of the microscope, it was placed in a net made by gumming cotton thread across a hole cut in a card, this card being placed in position under the microscope. The lighting should be from the side, and should be arranged beforehand, so that half of the field is lighted. With a magnification of 15 times, an exposure of 2 to 5 seconds was found necessary. To prevent the snowflake being melted by the breath of the operator breathing must be carried on through a curved tube.

Aniline Stains may be removed from the skin by acid or hypochlorite, but the better mode is to wash first with a 5 per cent solution of sodium chloride, then with hydrogen peroxide and finally to rub with a cloth moistened with alcohol.

Ringed Mounts.—For ringed mounts there is nothing neater, cleaner or more convenient for use than liquid shellac. Use the liquid pure without any admixture whatever. While the slide is upon the turn-table apply the liquid with a fine brush and finish with the point of a knife blade. Rings thus finished look almost as if made of solid glass. If a fancy mount is desired, paint a design on the slide and run the ring over it, as above. These rings make a handsome finish, which every one will admire. One can prepare the liquid himself. It may be obtained at a varnish factory or procured from dealers in microscopic supplies.

Bleaching Animals and Sections Fixed with Osmic Mixture.—Dr. Carazzi, of the Spezia Civil Museum, gives the following "oxygenated-water method" for getting rid of the blackening caused by osmic acid treatment.

The peroxide of hydrogen becomes reduced at contact with organic matter, and this is bleached by the oxygen. But the oxygenated water is very unstable and in a short time the peroxide of hydrogen is converted into water. By the chlorine method, heat was necessary and it has an injurious effect upon the tissues.

The difficulties are obviated by the peroxide of sodium method. The compound is a yellowish powder; when put in water oxygen is evolved and the liquid becomes alkaline. But if the water is mixed with acid the liquid remains neutral, because the soda combines with the acid.

Large quantities of peroxide must not be put in a small quantity of water, nor mineral acids be used, otherwise a violent reaction is set up, oxygen being evolved in large amount and the molecules of powder being thrown all around.

The acids more convenient for use are tartaric and acetic. For bleaching, use the following: Put a solution of tartaric or acetic acid (10 per cent) in a vessel if for animals, and in a test tube if for microscopical sections, sink a small quantity of the peroxide, add slowly 70 per cent alcohol at the surface of the water put in the object. The oxygen escapes from the water, rises quickly to the level of separation of the two liquids and dissolves in the alcohol, slowly bleaching the specimen which is supported in the alcohol.

**Microscopical Journal.*

Student's Column.

Organic Materia Medica of the U. S. P.

[Continued from Page 350.]

Benzoinum. Benzoin; gum benjamin.

BOTANICAL NAME.....*Styrax Benzoin*.
NATURAL ORDER.....*Styracæ*.
HABITAT.....Borneo, Java and Sumatra.
CONSTITUENTS.....Several resins, trace of volatile oil, 12 to 20 per cent. of benzoic acid, cinnamic acid.
PROPERTIES.....Stimulant and expectorant in catarrhal affections.
PARTS USED.....The resinous exudation from the stem.

Dose—Tinct. Cc. 2–4. Tinct. benzoin Co. Cc. 2–4; also as application to indolent sores.

Bryonia. Bryonia; bryony.

BOTANICAL NAME.....*Bryonia alba* and *bryonia dioica*.
NATURAL ORDER.....*Cucurbitacæ*.
HABITAT.....Europe.
CONSTITUENTS.....Bitter principle (bryonin), starch, gum, sugar, albumin.
PROPERTIES.....Drastic purgative and diuretic.
PARTS USED.....The dried root.

Dose—Tinct. Cc. 1–4.

Buchu. Buchu; buchu leaves.

BOTANICAL NAME.....*Barosma betulina* and *barosma crenulata*.
NATURAL ORDER.....*Rutacæ*.
HABITAT.....Southern portion of Africa, Cape Colony.
CONSTITUENTS.....Volatile oil ($\frac{1}{4}$ to 1.63 per cent.), stearopten (diosphenol), resinous, gummy and coloring matters.
PROPERTIES.....Stimulant in catarrh of the bladder and diseases of the urinary organs.
PARTS USED.....The dried leaves.

Dose—Ext. fld. Cc. 1.20–2.00.

Calamus. Calamus; sweet flag.

BOTANICAL NAME.....*Acorus calamus*.
NATURAL ORDER.....*Aroideæ*.
HABITAT.....North America, Northern Asia; cultivated in Burmah and Ceylon.
CONSTITUENTS.....Volatile oil, bitter principle (acorin), starch, gum, soft resin, cellulose.
PROPERTIES.....Aromatic stimulant.
PARTS USED.....The dried rhizome.

Dose—Ext. fld. Cc. 0.60–1.30.

Calendula. Calendula; marigold.

BOTANICAL NAME.....*Calendula officinalis*.
NATURAL ORDER.....*Compositæ*.
HABITAT.....Southern Europe and the Levant; cultivated in the United States.
CONSTITUENTS.....Amorphous bitter principle and calendulin.
PROPERTIES.....Supposed stimulant and resolvent; sedative to cancerous ulcers.
PARTS USED.....The unexpanded flowers.

Dose—Tinct. applied externally.

Calumba. Calumba; columbo.

BOTANICAL NAME.....*Jateorhiza palmata*.
NATURAL ORDER.....*Menispermæ*.
HABITAT.....Forests of Mozambique in Eastern Africa; enters commerce from Zanzibar or through Bombay.
CONSTITUENTS.....Columbin $C_{45}H_{87}NO_4$; starch, pectin, gum, yellow resin.
PROPERTIES.....Bitter stomachic tonic.
PARTS USED.....The dried and sliced root.

Dose—Ext. fld. Cc. 4 in watery dilution; Tinct. Cc. 4–8.

Cambogia. Gamboge.

BOTANICAL NAME.....*Garcinia Hanburii*.
NATURAL ORDER.....*Guttifera*.
HABITAT.....Siam, Cambodia, and Cochinchina.
CONSTITUENTS.....Resin (Cambogia acid), gummy matter.
PROPERTIES.....Drastic and hydragogue cathartic.
PARTS USED.....The gum resin.

Dose—Gm. 0.06–0.30.

Camphor. Camphor; gum camphor.

BOTANICAL NAME.....*Cinnamomum Camphora*.
NATURAL ORDER.....*Laurinæ*.
HABITAT.....China and Japan, chiefly in Island of Formosa; cultivated in Florida.
CONSTITUENTS.....
PROPERTIES.....Stimulant, sedative, antispasmodic.

PART USED.....The concrete volatile oil.

Dose—Aqua. Cc. 16; Spirit Cc. 0.30–2. External. Linim. (1 in 5); Lin. Saponis (1 in 20, about).

(To be Continued.)

Written for the
American Druggist and Pharmaceutical Record.

A PRACTICAL DRUGGIST'S ADVERTISING.

By A. J. EMBREE.

Belton, Texas.

"Let me say before I write a single line that I believe in printers' ink to the very core; no advertising can be beneficial without an abundance of this. As to the way of using printers' ink: I would first get me a good location in the paper or papers in which I expected to place my matter, preferably adjoining the local column, and if I could not get this space I should procure the space nearest the local column, say about five or six inches double column or 10 inches single column. You might change from one to the other occasionally—"variety is the spice of life." Variety in advertising is noticeable—that is, a change of space, the size and shape, not the location. Keep your ad. always in the same location, for your readers will become accustomed to look in this place for your ad. Now, since you have gotten them to look for your space, the next thing to do is to put something in that space that will hold their attention. My idea of doing this is to have illustrations, small ones, in the body of your ad. or in the corner if you please, just so it is something that will attract attention. Let it be a comical or catchy illustration; I inclose a few which I have used very effectively. I have an outfit and do my own engraving, which reduces my expenses in that line to a minimum, and at the same time I get larger space for a less amount of money than I could if I had my ads. set up in type, because I knock the compositor out of a small job.

One ad.—"The Two Johns,"—has been running in our daily paper, and is a very good one, from the fact that J. C. Stewart's "Two Johns,"—a theatrical company—played here the next week and had billed the city thoroughly. This, of course, made the ad. very effective, and everybody noticed it when they read the paper, and this is what we put ads. in the paper for, you know.

I make a run on fishing tackle every spring, and it is done simply by using printers' ink judiciously.

Never allow an ad. to run over one time in your weekly, and change every day in your daily if you can find the time to attend to it. You must attend to your advertising if you wish to do business; my advice to business men who have not the time to attend to their ads. is to some get advertisement

which can be used very beneficially. The key and tag device is a good one; it emanates from Boston, and there are others that are equally as good. I trust these little suggestions will serve a good end; especially do I trust that they will bring trade to you as they have to me.

"WHITE ON BLACK."

Mr. A. J. Embree of Belton, Texas,

is doing some very effective advertising for his drug business, by a sense of quaint illustrations in the local press. These illustrations are printed from plates which he makes himself, and show the drawing and reading matter in white while the background is black.

There is really nothing new in this idea. Such plates and cuts have been used from the beginning of the art of printing, and were either engraved with tools, etched with acids, or in recent times, produced by the aid of photography.

All of these methods, however, were costly, and called for technical skill on the part of the engraver. We understand, however, that Mr. Embree produces his plates by a simple process recently invented by Mr. Henry Kahrs of 240 East 33d Street, New York City, in which the elements of time in making and cost are reduced to a minimum. Briefly stated the plates are made by taking a sheet of thick, smooth cardboard, somewhat larger than the plate to be made and drawing the design upon it with a special ink furnished for the purpose, and in the manner described in the instructions sent to those who wish to use the process. When the drawing or writing is finished, it is heated to drive off the moisture, and then a cast is made from it in an ordinary stereotype



Designed by A. J. EMBREE, Belton, Texas.

Reproduced by HENRY KAHRs, New York.

writer to do it for him, as it will pay him. There are several good writers in New York who can attend to this at a nominal cost; there is Mr. Bates, Mr. Scarboro, Mr. Moses and others who can do you good work.

Little local lines in connection with display ads. are very good indeed—they are good feeders for the displays. Occasionally you can find a good novelty

casting-box, exactly in the same way as if the card-board with the drawing on it were an ordinary papier maché matrix. The writing or drawing will be found depressed into or hollowed out of the plate, and this when printed from will show white lines on a black ground. The whole operation should not take more than ten minutes after the drawing is done. The card-

board represents the chief cost for material (leaving the metal out of the question, as that may be remelted and used over again). The advantages of the process are apparent. The advertiser can make his own plates at home cheaply and quickly; he can change his advertisements frequently, grasp novel features and make use of them at once, and even if he is no artist he can make up ads. that people must notice, and "sometimes a striking advertisement, even if crude in design, is a better fetcher than an art study."

A Pretty Window Experiment.

Prepare a small beaker or jar full of cold saturated solution of Glauber's salt, and into the solution suspend by means of threads a kidney bean and a non-porous body such as a marble, stone, piece of glass or other suitable material. Now cover the jar, and in a short time there will be seen radiating from the bean small crystals of sulphate of soda, which will increase and give the bean the aspect of a sea urchin, while the non-porous body remains untouched. The bean appears to have a special partiality for the crystals, which is due in fact to the absorption of water by the bean, but not of the salt. In this way a super-saturated solution is formed in the immediate neighborhood of the bean, and the crystals, in forming, attach themselves to its surface.

A Novel Device.

W. P. Draper, a druggist of Springfield, Me., recently drew considerable attention to his store by distributing what appeared to be walnuts. These when opened were found to contain a roll of paper advertising several of Mr. Draper's specialties, and also a diminutive bottle of perfumery.

Nathan G. Bubier, a pharmacist of Lynn, Mass., contributes the following to *Printers' Ink*:

Not long ago I noticed the following in the window of a Salem druggist. The display was of nursing bottles, with complete fittings:

GIVE THE LITTLE SUCKERS
A CHANCE.
TWENTY-FIVE CENTS.

It is perhaps needless to say that the ad "caught the town."

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the second issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 15, 1914.

shall find at its center, a cylindrical mass of pith and next to this a tube or sheath (medullary sheath) and then one or more tubes of wood, outside of all a cover of bark. Each year a new ring of bark and a new layer of wood will be added, this method of growth, from the center outward is called exogenous.

Endogens have no true bark, no true wood, a stem almost unbranched, there is no cambium layer. The leaves are parallel veined, its flowers are three parted, its seed has but one seed leaf or cotyledon.

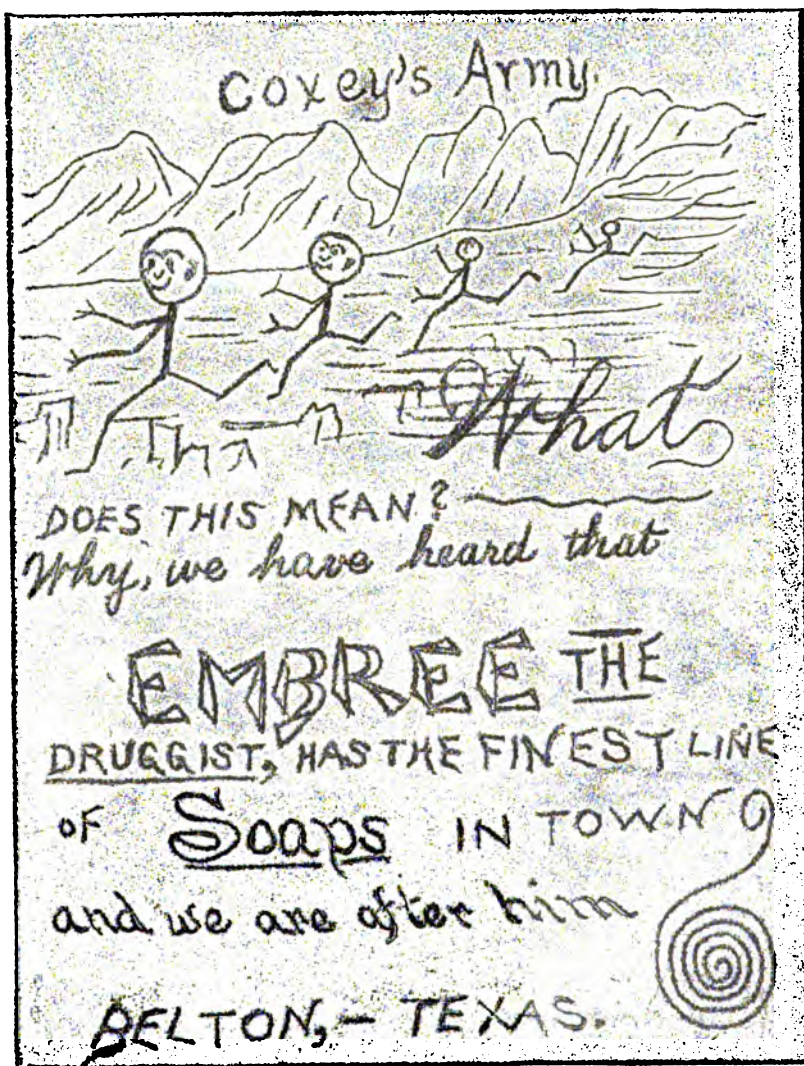
Exogens have a pith, a medullary sheath, layers of heart and sap wood, a bark of three layers, they increase annually by the addition of rings of woody tissue, the leaves are net veined, flowers mostly five parted and seeds have two cotyledons.

If we examine the stem of a banana we shall find the entire center composed of a pithy material covered by a tough fibrous rind. Running through this pulp, from bottom to top, are bundles of fibrous tissue. At some points the fibres bend out and go to the rind, forming part of it, and again, higher up, this same fibre returns to the center and unites with the bundle it had previously left. There are no distinctions of bark and wood and the plant literally grows from within and is called an endogen.

142. In many orders of phanerogams, tissues are found whose component elements contain a milky or colored fluid. To those, although varying greatly in structure and position, the general name of laticiferous tissue, or ducts, has been given. Two general forms may be distinguished.

(1) That composed of simple or branching elements, which are scattered through the other tissues. As found in Euphorbiaceae, where they occur in parenchyma, they are somewhat

simply branched and have very thick walls. In other orders they are thin-walled and are sometimes inclined to anastomose. From their position it is quite certain that the elements of this form of laticiferous tissue frequently replace bast fibres. In such cases they are said to be metamorphosed bast fibres; in other cases, however, they appear not to be of this nature, but to arise from the parenchyma by the absorption of the horizontal partition walls.



Designed by A. J. EMBREE, Belton, Texas.

Executed by HENRY KAHRS, New York.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Questions; Thirteenth Series.

141. If a twig from an elm or willow tree be cut across and examined, we

(2) The other form is that composed of reticulately anastomosing vessels. Here the tissue is the result of the fusion of great numbers of short cells. The walls are thin and often irregular in outline. In Cichoriaceae, this form of laticiferous duct is very perfectly developed as a constituent part of the phloem portion of the fibro-vascular bundles.

The composition of the latex is usually water (with or without an organic acid), albumen, wax resin, gum, sugar, and ash. The walls of the laticiferous elements are composed of cellulose. Opium and rubber are the product of laticiferous ducts.

143. The cambium layer is a mass of narrow, somewhat elongated, thin-walled cells, lying on the outer side of the tracheary tissue, between the phloem and xylem, forming what is called the open bundle. These cells are filled with protoplasm, or formative matter. The function of the cambium layers is the formation of new bundles and tissues, inner and outer. The cambium is thus the formative layer in exogens.

144. The chief coloring matter of leaves is chlorophyll, the exact chemical composition of which is not definitely known, but it probably contains carbon, hydrogen, nitrogen, and oxygen, and there is good reason for believing, some iron. It is believed to contain two coloring principles, one yellow, the other blue; in the autumn the blue color fades and leaves the yellow.

145. Sclerenchymatous tissue—The hard parts of plants, composed of cells whose walls are thickened often to a very considerable extent. The cells are usually short, but in some cases they are greatly elongated; sometimes regular in outline, but more frequently they are extremely irregular. They do not contain chlorophyll, but in some cases starch.

Parenchymatous tissue is the most abundant of tissues in the vegetable kingdom; it is at once the most important and the most variable. It is usually composed of cells whose walls are thin, colorless, or nearly so, and transparent; in outline they may be rounded, cubical, polyhedral, pumatic, cylindrical, tabular, stellate and many other forms. When the cells are bounded by plane surfaces generally, but not always, the end planes lie at right angles to the longer axis of the cells. This tissue makes up the whole substance of many of the lower plants.

In the higher plants the essential portions of the assimilative, vegetative—(growing)—and reproductive parts are composed of parenchymatous tissue.

146. The terms division, class, genus and species are used in botany to identify a particular plant from all others. We first divide the great vegetable kingdom into two sub-kingdoms. The plants which produce flowers and seed are put into the first of these, and are called Phanerogamia. The others are assigned to the Cryptogamia. Sub-kingdom I. is again divided into three classes: Angiosperms, seeds enclosed in a cover or pericarp and

having two cotyledons. Gymnosperms, seeds naked or having no pericarp. Monocotyledons, plants having embryo with one seed leaf. Sub-kingdom II is divided into six classes:

1. Pteridophyta; ferns.
2. Bryophyta; mosses.
3. Carposporae; toad stools.
4. Oosporeae; some sea weeds.
5. Zygosporae; moulds.
6. Protophyta; yeast and bacteria.

These classes are then divided into numerous orders, which include all genera having close relationship; thus we put into the same order the apple and the rose, since it is evident they are related forms.

Orders are again divided into genera, which are composed of species nearly related. The flowers which are alike in stem, leaves, flower and fruit, and must therefore have originated from a common parent, are assigned to the same species. A slight modification of a species is called a variety.

There is a considerable difference in classification, as given by different authors.

147. The official name, botanical name, habitat, principle constituents and part used of the plants of the order Umbelliferae are as follows:

Ammosacum, dorema ammoniacum, Persia. Volatile oil, gum, resin. Part used, gum-resin.

Anisum, pimpinella anisum, Europe and China. Volatile oil. Part used, fruit.

Asafoetida, ferula foetida, Afghanistan. Volatile oil, resin, gum, ferulic acid. Part used, gum-resin.

Carum, carum carvi, England and Germany. Volatile oil. Part used, fruit.

Conium, conium maculatum, Britain. Conine. Part used, leaves.

Coriandrum, coriandrum sativum, Britain. Volatile oil. Part used, fruit.

Foeniculum, foeniculum capillaceum, Malta. Volatile oil. Part used, fruit.

149. Botanical substances contained in compound cathartic pills:

Exogonium purga, Vera Cruz. Part used, resin jalapin.

Garcinia hanburii, China. Part used, resin.

Citrullus colocynthus, North Africa to Morocco, Egypt, Nubia. Part used, extract of fruit.

Aloe socotrina, Isle of Socotra. Part used, juice of leaves.

Elettaria cardamomum, East Indies. Part used, fruit.

Convolvulus scammonia, Asia Minor. Part used, resin.

150. The order Hydrophyllaceae is not represented in the U. S. Pharmacopoeia. The plants belonging to this order are for the most part showy garden plants.

Names of Students Whose Grade Stood 75 on the 13th Series.

E. Q. Anwalt, Philadelphia.
James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. J. C. Boyer, Wisconsin, Pa. T. H. Brennan, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponchartraine, La. G. E. Barksdale, Richmond, Va. Miss Maude Florence Cain, Lancaster, Pa. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centerville, Tenn. H. J. Force, Newark, N. J.

William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.

Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Seymour Hull, Hooick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawry, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Laval, Gouverneur, N. Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulball, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centerville, Tenn.

W. B. Nethery, Toronto Junction, Ont.

Edward L. Page, Lancaster, Pa. J. H. Pratt, Birmingham, Ala.

A. V. Rand, Wolfville, N. S.

Aber V. Smith, Clarksburg, W. Va. Clarence O. Snavely, Lebanon, Pa. Moses W. Somers, Boston, Mass. W. E. Smurl, Parsons, Pa. W. A. Sichel, Snow Shoe, Pa. W. Scallin, Mitchell, S. Dak.

Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va.

W. H. Van Strander, Winsted, Conn.

Bertie Ward, Orange, N. J. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

Miss Emma A. Wiggins, Exeter, N. H.

Questions; First Series.

MATERIA MEDICA.

References: Maisch's Materia Medica, U. S. Dispensatory, National Dispensatory, U. S. Pharmacopoeia, and Oldberg's Home Study of Pharmacy.

1. Name two monocotyledonous roots used in medicine.

2. Name and briefly describe two fleshy medicinal dicotyledonous roots free from starch and inulin.

3. Name and briefly describe three fleshy, medicinal dicotyledonous roots free from starch but containing inulin.

4. Name and briefly describe two fleshy medicinal dicotyledonous roots containing starch and with laticiferous vessels in the bark.

5. Name and briefly describe one fleshy medicinal dicotyledonous root containing starch with radiating rows of resin cells in bark.

6. Name and briefly describe a fleshy tuberous dicotyledonous medicinal root containing starch with resin cells not radiating.

7. Name and briefly describe a woody, medicinal, dicotyledonous root with wood firm and medullary rays narrow and with sweet taste.

8. Name and briefly describe a woody medicinal, dicotyledonous root with wood firm and medullary rays narrow and with bitter nauseating taste.

9. Name and briefly describe a woody, medicinal dicotyledonous root with wood firm and medullary rays narrow and with bitter aromatic taste.

10. Name and briefly describe a woody, medicinal dicotyledonous root with wood firm and medullary rays narrow and with astringent taste.

Phosphorus Butter.—M. Comby proposes the following modification of Trousean's for the preparation of an iodo-phosphorated butter which may be used as a substitute for cod liver oil in hot weather

Fresh butter.....	17½ ounces
Potassium iodide.....	4 grains
Potassium bromide.....	15 grains
Sodium chloride.....	2 drams
Phosphorus.....	½ grain

About a third of an ounce is to be taken daily, spread on bread.

Insect Lotion.—The *Presse Medicale* gives the following formula:

	Parts
Strong ammonia water.....	80
Collodion.....	10
Salicylic acid.....	1

A drop of the solution to be applied to each bite.

New York State Pharmaceutical Association.

SIXTEENTH ANNUAL CONVENTION.

The proceedings of the sixteenth convention opened in the reading-room of the United States Hotel, Saratoga Springs, N. Y., on Tuesday, June 26, at 12 noon, with C. A. Rano, president, in the chair. Mr. Rano introduced C. W. Mitchell, the president of the village of Saratoga, who delivered an address of welcome. He had anticipated with interest and pleasure the arrival of the members, and proceeded to read a prescription which he said he would like the members to compound and take *secundum arte*. Saratoga was Nature's laboratory. More opportunities existed in Saratoga for spending an enjoyable vacation than in many other places that could be named. The prescription he proposed was a pleasant one, consisting of plentiful doses of Saratoga scenery, Saratoga spring water, etc. etc.

Dr. Gregory responded to the address of welcome as follows:

MR. PRESIDENT, LADIES AND GENTLEMEN:—I had wondered all the way why our president had been so solicitous for my welfare. I could scarcely pass to

I could not quite understand the reason until this moment, but I see now that it was because he wished me to act as his spokesman.

It gives me great pleasure, even though I have been corralled, to respond to this address of welcome. We will endeavor to enjoy the climate which our friend assures us they have in very large variety and quantity. I am sure that the climate is at the present moment more enjoyable than that which I left at home. We will endeavor also to enjoy the water of which he spoke. Some of us have already imbibed it in large quantities. We will try to take in the various forms of entertainment which all presented to us, our desire also being to avoid being taken in. I think we shall have to spend a few hours possibly in going to that historic spot, Mt. McGregor, where the great hero of this country died, and there pay our tribute of respect to his memory. We will also ride upon the waters of your far-famed lake, and if the exhilarating character of the Spring water is such that it shall not restrain our movements so that we are able to get away in health and safety, we shall be anxious to come again.

I thank you in behalf of the Association. I thank the citizens for whom you speak for the welcome extended to us.

!!Secretary Holmes then read several letters of invitation from the proprietors of mineral springs. The firms who so courteously placed their springs and property at the disposal of the pharmacists included the Congress Springs, Hathorn Springs, and Saratoga Vichy Springs. The proprietor of the Fort William Henry Hotel invited the members to visit Lake George. The invitation included free fishing and boating on the lake, followed by a luncheon on the hotel grounds. The invitation bore the signature of Macdonald & Co., owners.

Dr. Husted moved that the communication be placed on file and the invitation accepted with thanks.

At this point the Secretary announced that owing to illness and other causes no member of the executive committee was present.

President Rano moved that two members be selected from those in attendance to act *pro tem*, and Secretary Holmes was empowered to nominate. The following were selected: W. L. Rogers, W. L. Dubois.

A committee on credentials was then appointed after which the president's address was read as follows:

GENTLEMEN OF THE ASSOCIATION:—Before entering upon the business relating to the condition, prosperity and prospects of this association, I desire first to express my great appreciation of the distinguished honor you have conferred upon me by election to the highest office within your gift, and to sincerely thank my fellow-officers for their considerate kindness and co-operation. While mourning the loss of two of our beloved members, let us also express gratitude for our continuous blessings of life and health that so many members of this association are enabled to meet in this beautiful place to exchange greetings at this, our sixteenth annual reunion.

Pursuant to time-honored customs it becomes my duty at this time to review in general the affairs of the association during the past year, and make such suggestions for the future as may in my opinion be for its usefulness. The general depression in business that has existed throughout the entire country since our last meeting has been felt in our profession.

Although the practice of pharmacy has not been as remunerative during the past year as usual, no doubt trade has held its own with all mercantile pursuits.

On May 4, 1894, Willard N. Smith died at Clifton Springs. Mr. Smith was elected a member in 1880, and bore an excellent reputation among his neighbors for competence in his business and integrity in his private life.

I have recently learned of the death of Charles R. Paddock, of Brooklyn. Mr. Paddock was elected a member in 1885. I respectfully suggest suitable obituaries be prepared for them and published in the proceedings.

The result of the adoption of the recommendations of the committee on the advancement of the affairs of the association at the last annual meeting has met with unqualified success. The society is to be congratulated upon securing Prof. H. H. Rusby to deliver an address.

Professor Rusby is one of the leading scientists of this country. His lecture will be not only entertaining but exceedingly instructive.

The committee on commercial interests was placed in charge of Clark S. Ingraham, chairman, with an able corps of assistants representing each county in the State.

The chairman, possessed of unusual executive

ability, has made so great a success of this work as was possible in the present financial condition of the country. In spite of the efforts of this committee ruinous cutting exists in certain parts of the State to such an alarming extent, leading proprietary medicines are sold at retail for less than wholesale cost price. It is to be hoped the committee will be able to suggest some method which may be the means of restoring prices in all parts of the State.

The report of the first year's work will be of great interest.

Every pharmacist will look forward to the result of the action begun by John D. Parke against the National Wholesale Druggists' Association on account of having been placed on the cut off list. The determination of this suit may decide the future action of many leading manufacturers of proprietary medicines.

During the last session of the legislature the following bills, each of which were inimical to the interests of pharmacists, were introduced. Senate bill No. 799, Assembly bill No. 115, and the Southworth bill to regulate the sale of proprietary medicines.

Senate bill No. 799, to regulate the sale of opium, chloral and cocaine, was introduced by Senator Saxton upon request of Mrs. M. T. Burt, pres. W. C. T. U., and had the support of that association, contrary to a promise made to the committee on legislation by Mrs. Burt at Lakewood last year that no bills would be presented to the Legislature affecting the sale of opium, chloral or cocaine, through the efforts of the W. C. T. U., without submitting the same to your committee. The bill was presented without consultation and justly met with defeat, not having been reported from committee.



CHAS. F. FISH.

President-Elect of the New York State Pharmaceutical Association.

Charles Frederick Fish, the newly-elected president of the New York State Pharmaceutical Association, comes of old New England stock, his parents being natives of Connecticut of Yankee extraction. He was born in the village of Saratoga Springs, August 16, 1845. When 22 years old he became a partner in the business which his father established in 1840. The firm name was then changed from Geo. H. Fish to Geo. H. Fish & Son. This name was continued until after the death of his father in 1884, since which he has conducted the business under his own name. Mr. Fish is one of the original members of the State Association, and assisted materially toward its organization. His membership in the A. P. A. dates back to 1866. When the Association met in Saratoga in 1880 he was chosen local secretary. He has not been without honor in his own country, for the villagers have more than once selected him for local offices. The last official position held by him was that of President of the Board of Education. His election to the office of the President of the State Pharmaceutical Association is an honor worthily conferred, and in thus honoring Mr. Fish the Association has undoubtedly added to the lustre of its own glory.

the end of the car without his following me to see that I did not fall off the platform, and when we disembarked at Albany I noticed that he had a string tied to me.



CHAS. O. RANO.

Retiring President of the New York State Pharmaceutical Association.

It seems probable in the near future a change will be made in that section of the Criminal Code relating to prescriptions containing opium, chloral and cocaine. There is a glowing feeling among many people that too few restrictions are required in dispensing these articles. I would recommend that the legislative committee draft suitable amendments to the present law, and submit same at next session of the association for approval and presentation to the legislature.

Assembly bill No. 115, requiring poisonous substances in liquid form to be dispensed in fluted bottles. This bill passed the Assembly and was defeated in the Senate. There seems to be a demand for a suitable "poison bottle."

The Douglas bill was too sweeping in its conditions and not practicable. A bill defining the shape and color of a bottle for poisons, and definitely stating what should and what should not be dispensed in it, would seem to be a proper amendment to the Criminal Code.

The bill to regulate the sale of proprietary medicines, after being presented and referred, died in committee. The bill did not meet the approval of the manufacturers of proprietary medicines nor the opponents. The requirement of having the precise composition of each proprietary medicine upon the label is a matter of serious consideration at your hands.

I desire to call the attention of the association to the increased rate of tax on distilled spirits as proposed in bill H. R. 4864, known as the Wilson Tariff bill now pending in U. S. Senate. The present tax on distilled spirits is 90c. per proof gallon on alcohol.

The proposed rate of duty on distilled spirits is \$1.10 per proof gallon, \$2.48 per gallon on alcohol. I would suggest pronounced action be taken by the association against any increased rate of tax on distilled spirits.

I will conclude with the expression of a hope that this meeting may be crowned with highest success, and the new departure of the association prove to be of lasting benefit.

On motion of Mr. Holmes the address was referred to a committee composed of Dr. A. B. Husted, E. A. Harvey and Chas. H. Butler.

A letter was read from the Secretary of the New York County Branch of the Interstate Retail Druggists' League, in which it was stated that delegates from the Branch would be present to secure for theretofore adopted resolution concerning petrolatum products the endorsement of the State association. The communication was ordered tabled to await the appearance of the delegates.

Secretary Holmes presented his annual report for 1893.

The report was ordered printed.

The treasurer was next heard from, and his report indicated that the treasury was in a fairly flourishing condition. The report was on motion referred to the executive committee.

After some discussion it was moved that the citizens of Saratoga be invited to attend Dr. Rusby's lecture on Wednesday evening.

The forenoon session was brought to a close with a short address by C. F. Fish, local secretary and chairman of the committee on entertainment, who outlined the various entertainments provided.

The afternoon session opened at half past three o'clock, with W. H. Rogers in the chair.

The committee on president's address reported in the various recommendations contained therein, as follows:

Regarding the proposed increase of tax on alcohol the committee offered the following resolution:

Resolved, That as an association we emphatically condemn the proposed increase of tax on alcohol as unjust to the large number of people who are obliged to use it for proper and legitimate purposes, and as a medicinal agent.

An amendment to this resolution, moving that the secretary of the association be empowered to take the steps necessary to bring the action taken to the notice of the proper authorities, was adopted.

In reference to the president's recommendation that the legislation committee be instructed to draft a bill proposing suitable amendments to the present laws governing the sale of opium, cocaine and chloral, the committee stated that a proper law for regulating the sale of those articles is not easily drafted. The matter had been under consideration by members of the

association for two years, and they seem to be unable to devise or propose a satisfactory law.

It would seem, therefore, that if anything is to be accomplished in this direction, it would be better that a special committee on this subject be appointed.

In the discussion which followed, Mr. Rano moved that the appointing of such a committee be referred to the incoming president after his election and installation. R. R. Smither, of Buffalo, will probably be requested to draft the bill, as he is believed to be best fitted for the task.

The fourth recommendation of the president is a most important one, and the committee, composed of Dr. A. B. Husted, E. A. Harvey and Charles H. Butler, reported as follows:

TO REGULATE THE SALE OF PROPRIETARY MEDICINES.

With reference to the matter of a law compelling the publication of the composition of all secret or proprietary medicines upon the bottle or package containing the same, your committee are in full accord, and would recommend that a bill containing such provisions be directed to be drafted by the Legislation Committee and presented to the next legislature, and urged to its passage.

The Secretary here made announcement that the Massachusetts Pharmaceutical Association was now in session, and suggested that a telegram of congratulation be sent. It was so ordered.

The report of the committee on new remedies, J. H. Hutchins, New York city, chairman, was read by title. Mr. Holmes explained that the report was an especially valuable one, and its compilation must have entailed unusual labor.

On motion the association passed a special vote of thanks to Mr. Hutchins, as a token of their appreciation of the excellent character of the report.

The report of the committee on sixty was then presented. This report shows the status of affairs relating to the organization of the drug trade of the State.

Referring to this report the secretary said:

"I would, as chairman of this committee, recommend that the committee of sixty be maintained as it is organized, that is, one committeeman selected from each county of the State who will communicate with the chairman, thus keeping in touch with all parts of the State, but that no further appropriations be made for the purpose of trying to organize the counties as long as the counties manifest no desire to be organized, or to act with the State Association in trying to promote the fraternal and commercial relations of our brethren throughout the State."

Twelve names were proposed for membership and posted for action at a subsequent session.

Communications from the president of the New England Drug Union and G. W. Ostlander were received and referred to the proper committees. After transacting sundry other routine business the first day's session was concluded and the association adjourned to meet on the following morning at 11 o'clock.

In the evening the members visited the famous reproduction of a Pompeian mansion, known as the "House of Pausa." Here they were met by Franklin W. Smith, who delivered a most entertaining lecture descriptive of the house and its antiquities. Mr. Smith proved an enthusiast of the most ardent description. It was impossible to resist the charm of his delivery and manners as he portrayed the customs of the Ancient Romans. It was altogether a delightful experience for every one who participated.

The first session on Wednesday was opened at 12.20 P. M. by President Rano. After reading the minutes of the previous meeting, the secretary announced the following nominations to membership:



CLAY W. HOLMES.

The alert looking gentleman whose features are delineated above is so well known to the pharmacists of this State from his connection with the State Association since its organization in 1879, as to scarcely require word of mention here. With J. A. Miller of the Pennsylvania Association, he shares the distinction of being the oldest secretary in point of service, of any association secretary in the United States. Clay W. Holmes was born in Le Raysville, Penn., Sept. 25, 1848. In 1861 he attended a private school at Troy, Pa. In 1862 he entered the Susquehanna Collegiate Institute at Towanda, Pa., where he remained two years. In 1864 he entered the advanced class of Cortland Academy at Homer, N. Y. In the fall of 1865, at the age of 16, he entered Lafayette College as a freshman. During the second term senior, being then in his twentieth year, a telegram came announcing the death of his father at his home in Elmira, N. Y.

The loss of his father made it necessary to forego the expense of graduation exercises. Entering a drug store, he pursued at the same time the study of medicine. In the fall of 1866 he entered the University of Pennsylvania and attended the course of medical lectures; but abandoned the idea of graduating as a physician before the commencement of the second term. Early in 1871 the position of manager of a store in Wilkesbarre, Pa., was tendered and at once accepted. In November of the same year he was married and took up his residence there. In June, 1872, the position was given up and he opened a drug store on his own account. The venture was immediately successful. January 1, 1878, he sold out and returned to Elmira, buying a half interest in a retail drug store. In 1881 the retail business was dropped and an exclusively wholesale and manufacturing business opened. This was successful. In 1885 the store was burned out. Heavy losses reduced him to first principles. With no capital except willing hands, a manufacturing business was started, soon devoted exclusively to the manufacture of one specialty, which was from the first a flattering success, and has a universal sale throughout the United States and Canada. In January 1889 he was appointed general manager of the Elmira Advertiser, which a position he still holds. Mr. Holmes is held in deservedly high estimation by everyone connected with the different boards and associations of the State, as he is always ready and willing to be of service to his friends in the craft. By many he is looked upon as the watch-dog of the State association, and his devotion to its affairs certainly affords some justification for the title.

Frank E. Mitchell, Ballston; Dr. A. B. Brundage, Brooklyn; Martin Van Emery, Buffalo; Henry D. Deuchler, Buffalo; Ed. Villars, Carthage; Edward Sayer, Cornith; W. E. Baldwin, Glen Falls; John B. Dixon, Hornersville; Geo. H. Bancroft, L. A. McGraw, Geo. E. Heuther, Thomas J. Keenan, Alfred Hy. Mason, New York City; Francis Tucker, Sandy Creek; Charles C. Strong, Oswego.

Upon motion duly seconded, Mr. Dubois was instructed to cast one affirmative ballot for the names proposed, after which formality the nominees were declared duly elected members of the Association.

The Committee on Adulteration presented a valuable and interesting report on the adulterations and sophistications of drugs which had come under their observation during the interval subsequent to the last meeting. In addition to this the report contains reference to the composition of various widely advertised nostrums. Its value was fully appreciated by the Association, and a unanimous vote of thanks was tendered to the Committee and the report ordered printed in the proceedings of the Association. (See page 12.)

The report of the Committee on Legislation was made by Dr. A. B. Husted. Six measures affecting pharmaceutical interests had been introduced into the State Legislation during the past six months.

On Jan. 11, the Douglas bill, providing for a special poison bottle, was heard from, when it passed to a third reading in the Senate. The measure was criticised as sweeping in its conclusions, and impossible from simple economic reasons. Through well directed efforts of the State Association the bill was never reported back from the Assembly.

On February 16, a measure to amend the state pharmacy law made its appearance in the state assembly. It did not meet with the approval of the committee on legislation of the N. Y. S. P. A., and the veto of the Governor was all that prevented it from becoming law. In vetoing the proposed measure, Governor Flower expressed himself as follows:

This bill amends sections 184 and 187 of the public health law. The general object of the amendment to section 184 is to enable persons who have failed to apply for their licenses as pharmacists within the time prescribed to make application hereafter, and also to correct a clerical error in the existing section by changing the word "resignation" to "registration." The only amendment apparently intended to be made to section 187 was to correct the spelling of the word "peppermint," and another clerical error is made in the bill by changing the word "usual" to "unusual," so as to permit the sale of unusual domestic remedies by retail druggists in the rural districts without license as pharmacists, and to prohibit the sale by them of usual remedies. The new clerical error is more serious than the clerical error which the bill undertakes to correct and the measure ought not to be approved in its present shape.

Senator Saxton's bill to regulate the sale of opium, chloral, and cocaine, which was introduced at the instance of the President of The Women's Christian Temperance Union on March 8, met with the same fate.

Several Excise measures affecting pharmacists had received the attention of the committee, and those deemed likely to prove injurious opposed.

The report proved very interesting and a long discussion ensued.

Two subjects of the report were of special importance and deserved consideration. The first was that dealing with the passage of a law to provide for the dispensing of poisons in bottles of special design. The question of how best to increase the income of the State Board is of great importance. The Board is at present much hampered in its operations by a lack of funds, the registration fees

alone having been found insufficient to defray necessary expenses.

President Rano directed attention to the important character of the suggestions contained in the report of the Committee, and invited the members to discuss them freely.

Dr. Willis G. Gregory said he did not see much merit in a measure looking to the dispensing of poisons in fluted bottles. If he were a bottle manufacturer it might be different. He was opposed to giving the matter any consideration, as he thought safety in dispensing poisons would be best secured by making dispensers feel their own responsibility. No matter how much ingenuity might be displayed in designing a poison bottle, the container would ultimately lose its distinctive character and come to be used without discrimination as a receptacle for both poisonous and harmless substances.

Dr. Husted agreed with Dr. Gregory that measures of the kind proposed should be opposed. The fact that outside parties were constantly active in introducing such measures was not sufficient reason for the State Association to move in the matter.

President Rano favored the idea of providing an official poison bottle, and again read that portion of his address relating to the Douglas bill.

W. H. Rogers took up the passage and spoke against it, practically endorsing the position taken by Dr. Gregory.

Dr. R. G. Eccles joined in the discussion, and commented upon the fact that one point had not been touched upon in the discussion. The public would soon become familiar with poisons put up in colored bottles, and the familiarity would result in carelessness. Without reference to this, however, he was utterly opposed to special legislation of the kind proposed. Too much law in his opinion bred anarchy, and he very convincingly demonstrated the soundness of his logic by setting up an imaginary case where a merchant encompassed by too many laws but faithful in their observance is easily beaten by a business rival who happens to be less scrupulous in observing the law.

The shape of the bottle he would recommend would be one resembling an old-fashioned ink bottle—that is, if a new shape were desirable; but he was against the making of new laws bearing upon the subject. Laws, in his opinion, were productive of anarchy, and every new addition to the statute books made a new anarchist.

Alfred Hy. Mason said he thought the suggestion of procuring special legislation against the dispensing of poisons in other than bottles of a special design a weak one.

No one had ever yet been able to prevent accidental poisoning. The old method provided for the use of a red label; but the public must be educated up to the exercise of care. He had heard of a bottle so constructed that its usefulness was destroyed by the mere act of opening it. This was obtained by shaping the neck in such a way as to render it impossible to empty the bottle without breaking it.

Geo. Kempton suggested the use of a specially designed label. Such a device, he said, had been in use for some time by one of his acquaintances, and he was favorably impressed with its utility.

Dr. Willis G. Gregory moved that the association place itself on record as being opposed to any legislation of the character of that proposed, and after a short discussion, in which Dr. Eccles took part, a motion to that effect was drawn up and adopted unanimously.

Dr. Husted then read that portion of his report dealing with the proposed pharmacy law. He reviewed the position taken by him and his associates with reference to the matter, and went over the ground reviewed by His Excellency Governor Flower, which we quote elsewhere.

After appointing a committee of three to select names for presentation to the Governor to fill vacancies on the Board of Pharmacy; and a committee of three to consider place of next meeting the convention adjourned until evening.

The association reconvened late on Wednesday evening. President Rano occupying the chair. After moving a special vote of thanks to the Committee on Adulterations, which was adopted with acclamation, the secretary read a telegram of greeting from the Massachusetts Pharmaceutical Association then in annual convention at Worcester.

The reading of scientific papers was then taken up, and the secretary announced the reading by title of a paper read on "Ordo Rerum" by Thomas J. Keenan, New York City. On motion the paper was ordered to be printed in the proceedings of the Association. (See our last issue.)

The association then proceeded to the election of officers for the ensuing year which resulted as follows:

President, Charles Frederick Fish, Saratoga Springs; vice-presidents, Isaac Close Chapman, Newburgh; L. A. Baker, Cambridge; E. Sanford Gregory, Fort Plains; Secretary, Clay W. Holmes, Elmira; Treasurer, William B. Fuller, Syracuse; Executive Committee, W. L. Du Bois, Catskill; Willis G. Gregory, Buffalo; Clark S. Ingraham, Elmira.

The Committee on Board of Pharmacy reported the following names for presentation to the Governor for election: E. S. Dawson, Jr., Syracuse; W. L. DuBois, Catskill; W. H. Rogers, Middletown; C. B. Sayre, Auburn; Geo. E. Burrows, Chatham.

Clay W. Holmes placed Dr. R. G. Eccles' name in nomination for chairman of the delegates from the N. Y. S. P. A. to the coming meeting of the American Pharmaceutical Association at Asheville, N. C. There being no other nominations for the office, Dr. Eccles was duly elected.

In view of the difficulty which regularly accredited delegates of State associations experience in obtaining proper recognition at annual meetings of the National organization, Dr. Eccles considered it would be well for the New York State Association to request the A. P. A. to only acknowledge in its nominating committees, duly accredited delegates from State associations. He offered the following resolution which was adopted by unanimous consent:

Resolved, That the New York State Pharmaceutical Association request the American Pharmaceutical Association to only acknowledge in its nominating committees duly accredited delegates from State associations except in such States as have no such association or as have not sent such delegates.

Dr. Gregory reported for the committee on place of next meeting. Saratoga Springs was named first, Catskills Mountain House next. Saratoga was selected by ballot.

The matter of increasing the efficiency of the State Board by increasing its sources of revenue was then taken up. Two methods of bringing about an increase in funds were proposed—re-registration and raising of the examination fee. On motion of Mr. Rano the consideration of this matter was deferred.

E. S. Dawson, Jr., Secretary of the State Board of Pharmacy, said he had received a communication from Geo. W. Ostrander, in which the Board was arraigned for many sins of omission. It was Mr. Ostrander's opinion that the pharmacist of the State had received no benefit from the enactment of a pharmacy law.

Mr. Dawson admitted the truth of a number of Mr. Ostrander's assertions, and said the law itself was at fault, as under the present act it was next to impossible to secure evidence or even witnesses of infraction of the law. If the Association could suggest any method by which the work of the Board could be facilitated, it would be welcomed.

Continuing, he said it was discouraging work trying to get up complaints against offenders. He had approached some of the officers of the Association for assistance at different times, but had been told invariably that it was no concern of theirs. This was one of the discouragements he had met with in attempts to enforce the law. He said the Board cannot compel a witness to give evidence. Complaints received bore invariably the riders, "please don't use my name."

Secretary Holmes suggested giving the Board the power of a court of inquiry to summon witnesses, and secure evidence in that way.

President Rano stated it as the result of his experience on the Erie County Board, that he thought one Board could not do proper justice to the territory covered. Better results might be had were the authority divided. At present the State Board has supervision over about 50 counties, which was too much for one Board to look after.

Referring to the remarks of Mr. Dawson, Mr. Holmes said he received annually many communications relative to State Board matters, which it was his custom to refer immediately to the Secretary of the Board. He spoke of the law governing pharmacy in Quebec, contrasting it with the law presently in force in this state. All that is required to practise pharmacy in this state is a fee of \$5, and a certificate of proficiency. He considered a change necessary. The Board of Pharmacy of the State of New York can no more exist without money than any other Board. He was in favor of a yearly renewal of license, and thought there should be a close relation between the Association and the Board. There should be some provision made whereby investigations might be conducted, in that way, and that way only could the Board of Pharmacy become successful. He was inclined to favor the plan of making the licentiate become a member of the State Association on payment of the registration fee.

E. S. Smith, of Port Henry, discussed the subject at some length. He was in favor of the system pursued in the Province of Quebec, saying:

For the last two or three years I have been thinking considerably of the matter, and it is my impression that it is the only solution we can come to, because if the Board of Pharmacy has not got evidence to prosecute it cannot do it. The Province of Quebec does not require the person who gives the information to give any evidence at all, for the reason that the Registrar is notified of the name and address of the person who is violating the law. The Registrar takes the necessary steps by the orders of the Council. He goes to the parties at his first opportunity when the proprietor is present, or if the store is run without a registered pharmacist, he will walk in and buy something on the schedule of drugs that the unlicensed pharmacist has no authority to sell. He has then labelled with the regular label of the dealer, and walks out of the store leaving his card, saying nothing at all. He turns the medicine over into the Prosecuting Attorney's hands, the authority then passes from him to the District Attorney, who does the prosecuting, because the law explicitly says the label on the bottle is evidence! It requires nothing else for conviction.

Every pharmacist, from the apprentice to the proprietor, pays a legal fee towards the Pharmaceutical Association of the Province of Quebec. In the first instance, if I wish to become an apprentice to study pharmacy in the Province of Quebec, I have to present before the Board of Education a Normal School Certificate, or else they will put me under an examination similar to the Regents' Examination in New York State. If I pass according to the percentage required, I get a ticket giving me the privilege of studying pharmacy as an apprentice. From that day I become indebted to the Board of Pharmacy for 50 cents a year for the privilege of study. A licensed clerk pays a higher fee; a proprietor at the commencement pays \$10. At the present time we only pay \$5 for the renewal of license. At the expiration of the year, if we do not pay in 30 days, we are fined at the expiration of 60 days; our fine is increased to the amount of one yearly fee, and 10 days after that, if it is still unpaid, the name is taken off the list of registered pharmacists. Here, you see, is an income of \$5 from each of the pharmacists in the Province. There is not a man doing business who is allowed to sell poisonous drugs or medicines unless his name is on the list of registered pharmacists; if it is not there, he is violating the law.

We are doing all we can to sustain a pharmacy law for our own protection and that of the public, and I think our licensed clerks ought to pay a little to help to keep the Pharmaceutical Association in a position to protect them when they take our place.

At the expiration of two years after a man registers as an apprentice he is looked up and notified that he has to attend two courses of lectures in two years. There is no registered pharmacist who does not have to pass these two courses of lectures; he cannot be registered unless he does. The educational standard of these lecturers is laid down by the Pharmaceutical Association; the college has to comply with the requirements of the Association. At the expiration of two years he has his minor examination, and six months after that he has his major examination. When he becomes a proprietor he pays annual dues. We have got to get into a monopoly; if we don't combine we must go to the wall. I would be in favor of such a Board in this State, and am willing to pay \$5 a year for the renewal of my certificate. If the sum is less all the better, but I am willing to pay what is necessary.

Alfred Hy. Mason confirmed the truth of Mr. Smith's observation. He said: "As a licentiate of the College of Pharmacy of the Province of Quebec, and also for some time one of the Council, it may be of service if I confirm first what Mr. Smith has told you, with the addition, that if the Treasurer's report shows a shortage, the Council has power to increase the dues up to \$10 if they see fit."

"Like Mr. Holmes, I have my certificate locked up, but I have to pay the yearly dues or lose it, hence his proposal would be met by this condition of affairs."

The report of the State board was presented by Dr. Huested, chairman of the committee, and was on motion adopted as read.

Dr. Huested spoke of the difficulties which the board had encountered in prosecuting its work, the lack of funds being especially referred to. With regard to overcoming the latter difficulty he mentioned that some had recommended the obtaining of an appropriation from the legislature, but this was hardly feasible when it was considered that two examining boards were already in existence in the State, which were self supporting. He alluded to the regents' boards for examination of candidates for law and medicine. These boards were supported by examination fees. The fee for registration by this board is \$25.

He was inclined to view with favor the proposed increase in the fee for requesting pharmacists.

What good is in a pharmacy law? is a question which, he said, is often asked. Dr. Huested explained that the pharmacy law and the laws regulating the practice of law and medicine were framed for the benefit of the individuals directly concerned. He adduced reasons to show that a license is a pecuniary benefit to the clerk who holds it, and argued from these premises that the fee should be increased. His object in presenting this argument was to throw light on the points involved, many of the members being poorly posted on the subject.

The final session convened on Thursday morning at 9.30 o'clock. Thos. F. Main of New York City was introduced as a delegate from the State Association of Connecticut. He extended greetings and expressed the hope that he would meet some of the members present at the next meeting of the Connecticut Association.

Dr. Huested rose at this point and said it would be desirable to have an expression from the Association with reference to what they would consider the best method of raising funds to carry on the work of the State board. The different methods proposed consisted of re-registration, increase of examination fee, and an appropriation from the State. He asked for a free discussion. Speaking for himself he gave it as his opinion that the prospect of getting an appropriation from the State was dim. The method of raising funds by means of re registration was to a certain extent impracticable, owing to the difficulty of making collections. Personally he was in favor of increasing the examination fee. At present the board received a fee of \$5 for each proprietor's certificate, and \$3 for an assistant's. He said that he favored a higher registration fee because those to whom certificates were issued would be most directly benefited by the measure.

President Rano said he would not undertake to discuss the matter from the chair, but it seemed to him the Association should put itself on record in the matter. Discussion was invited.

Frank L. Norton, of Delhi, confessed that he had been in favor of re-registration, but he was forced to admit that it would impose a hardship on many druggists throughout the State. That there were advantages to be gained from adopting re-registration he conceded. No argument had been advanced against the adoption of this method, nor against the proposed increase of fee.

President Rano arose at this point to explain the workings of the Erie County law. In concluding he expressed the fear that the State board was hardly well enough equipped to cover the extent of ground contained in its territory.

W. H. Rogers then called upon Mr. Keenan of New York City to explain the workings of the pharmacy law of Illinois.

Mr. Keenan said "I am a licentiate of the State Board of Illinois as well as of New York county, and from my own knowledge of the working of the law in Illinois, I understand that they have no difficulty whatever in collecting the fees for re-registering licensed pharmacists. If a pharmacist neglects to pay his fees, his name is stricken from the list, and according to law, he is not allowed to carry on a pharmacy. From the discussion that has gone on here I am inclined to think that re registration would work to great advantage in New York State in more ways than one. It would work to the financial benefit of the board, and also to the better regulation of the laws, at least to the carrying out of the laws pertaining to pharmacy. The board would be better able to keep track of the delinquents, and those who might be practicing pharmacy without a license. I cannot go into details regarding the State pharmacy law of Illinois, but I remember that the license expires with the end of the fiscal year. The annual registration fee for proprietors, or those allowed to conduct a pharmacy, is one dollar. The registration fee in the first instance is five dollars. That is, so far as my recollection carries me; it is some time now since I have practiced pharmacy in Illinois."

John H. Hahn, one of the delegates from the Pennsylvania Association, spoke on the workings of the Pennsylvania Act. He was followed by several members of the New York Board who all expressed themselves in favor of re-registration.

The following resolution presented by A. D. McIntyre of Oswego, was finally adopted. It reads:

Resolved, that the legislative committee of this Association and the State Board of Pharmacy be requested to take such action as may be necessary for the purpose of raising sufficient funds for necessary purposes, and be it further resolved that this Association recommend that an effort be made to have an act passed retaining the present fee for original registration and adding a sufficient yearly fee for re-registration to meet the expenses of the State Board.

The election of a local secretary was taken up next, and Fred. Menges of Saratoga placed in nomination. There being no opposition he was unanimously elected.

A. Paradis and E. Alt were introduced as delegates from the King's County Pharmaceutical Society, Brooklyn, and Mr. Paradis acknowledged the courtesy.

The installation of officers concluded the proceedings, and on motion the association adjourned *sine die*.

THE AFTERMATH.

President Rano's inexhaustible supply of stories kept crowds of the boys entertained, but Professor Rusby's fish story captured the house.

E. A. Putnam and the AMERICAN DRUGGIST man were lucky to take passage on the fast launch for the trip on Saratoga Lake to White Sulphur Springs. Though hampered with a prosaic name, their boat, the "Katie," speedily distanced its slower companion, the "Erminie." In passing the latter Mr. Putnam generously offered to throw out a rope to tow it down the lake, but the offer was refused.

Geo. Kempton, Theo. Ricksecker's popular representative, was tireless in his efforts to contribute to the pleasure and amusement of the members, and it may be some satisfaction for him to know that his good work was thoroughly appreciated. He is an old Saratogian himself, and his knowledge of the different places of interest stood him and his friends in good stead. We hope we shall see him with us next year.

But what shall be said of the ladies? The affair would of course have been lifeless without them. Two in particular, in close attendance on the secretary, made things very bright and cheerful for several of the younger members, whom we have no doubt carried away very many pleasant memories of the meeting.

The lecture on Wednesday evening by Professor Rusby on "Rubber Industry in South America" was largely attended, and proved a most interesting feature of the proceedings. The chair was taken at 8:30 o'clock by Alfred Hy. Mason, Ph.C., F.C.S. who introduced the lecturer in a few well chosen words, calling attention to the results of his researches in pharmacy and materia medica. He alluded to his connection with the New York College of Pharmacy as professor of physiology, botany, materia medica and pharmacognosy, and said that we in America might look upon him as one upon whom Professor Maisch's mantle had fitly fallen. The lecture was illustrated with stereopticon views.

The convention was favored during the entire time of the sessions with the presence of a newly married couple, who chanced in on the meeting more by accident than intent. They were Geo. E. Heutner and his young and charming bride.

Geo. is a well-known and experienced Harlem druggist, but all his experience was of no avail in his efforts to keep the knowledge of his very recent marriage a secret. Some of the members speedily discovered it, and on his trip to Saratoga Lake he was treated to the time-honored dose of rice and old shoes.

Few of the members were aware of the presence of a lady "kodaker" among them, but such was the case. Miss Henry was the fair artist, and she succeeded in securing some clever snap shots of special views, etc. There were the steamboats on Lake Bonita for example, but "that is another story."

The exhibits were an important feature of this year's meeting. Tarrant & Co., wholesale druggists, New York City, displayed a large and valuable exhibit of hair brushes, perfumery and toilet requisites, as well as soda fountain supplies. The exhibits were arranged with good taste, and called forth many expressions of approval.

On Wednesday morning the members drove out to Woodlawn Park and the Spouting Springs. Many of the bottling establishments were visited on the way, and the members treated to liberal quantities of the different waters. As it is proverbial, however, that pharmacists seldom, if ever, take their own medicine, much of the sipping and tasting fell to the ladies who, it may be noted, performed their part well. The enjoyment of the drive was somewhat marred toward the close by a rain and thunderstorm, which caused many of the members to bring the trip to an abrupt termination. The famous racing stables of ex-Judge Hilton were visited on the way. The animals were put through their paces, and this exhibition afforded perhaps more genuine pleasure than any of the other sights seen during the day.

The delegates appointed by the New York College of Pharmacy to represent at the annual meeting of the New York State Pharmaceutical Association held in Saratoga last week were: Alfred Hy. Mason, chairman, C. F. Schleussner, Reuben R. Smith, C. O. Bigelow, Herman Graesser. Mr. Mason was the only delegate in attendance.

Theo. Ricksecker, the widely known New York perfumer, exhibited an unusually fine selection of perfumes, toilet soaps and powders. Ricksecker's goods must certainly be popular with the refined people who contribute to the gayeties of the season at Saratoga, for it was a matter of comment that every one of the local druggists was well stocked with the different varieties. It was noticeable that "Martha Washington" and "Floral Chimes" seem to be the favorite odors. The "Ricksecker" perfumes are remarkable both for fragrance and purity of odor, as well as for originality of conception in the style and arrangement of the containers. The labels commend themselves particularly as fine examples of high art in lithography as applied to perfume label work. An important feature of the exhibit was a display of Ricksecker's Skin Soap. As told elsewhere, this exhibit was under the charge of George Kempton, than whom no more gallant and genial representative of the commercial traveller is to be found.

William R. Warner made a very attractive display of pharmaceuticals, including granules and granular effervescent preparations.

"Well bought is half sold." Read the "trade notes" and market review every week.

Massachusetts Association.

The thirteenth annual meeting of the Massachusetts State Pharmaceutical Association was held at Worcester on the 26th, 27th and 28th of June. It was one of the most satisfactory annual meetings held since the inception of the organization. There was a large attendance, and a vast amount of business was transacted which was combined with a generous sprinkling of pleasure. That so much business was disposed of, was due in no small degree to the experience of President Rice and Secretary Leavitt, while the local arrangements ran so smoothly as to reflect creditably upon the local secretary, F. M. Harris. The first business meeting was held on the 26th. President Rice occupied the chair, and the delivery of his address was first in order. It dealt largely with trade interests, and the reading was intently listened to. The address was accepted and referred to the usual committee. The reports of the treasurer, secretary and trustees of the permanent fund followed.

In the evening there was an entertainment. C. F. Nixon, Ph.G., M. C. P., 84, gave "A talk on the medicinal plants indigenous to Massachusetts." It was an excellent paper, and was illustrated by plants grown by the author. A musicale followed.

Two business meetings occupied the next day. In the morning the report of the committee on "Trade Interests" was first taken up. It was not accepted, the reason being that it was the report of one man, and not of the committee. The vote on rejection was unanimous. The committee on "Legislation" reported that it had successfully contested many bills inimical to the drug trade, and that it had not asked for or urged the enactment of the new law pertaining to sixth-class licenses. Mr. Henry Canning for the "Local Organization" committee gave an interesting *resumé* of what had been accomplished in this State during the past year.

The afternoon session was first devoted to the reading of communications and to general business. The report of the delegates to the last A. P. A. meeting was submitted, and then officers were elected as follows: President, Frank M. Harris, Worcester; vice-presidents, Henry F. Rockwell of Fitchburg, Charles F. Nixon of Leominster, W. F. Sayer of Boston; secretary, Miner L. H. Leavitt of Boston; treasurer, Thomas B. Nichols of Salem; trustees, C. A. West, F. E. Mole and F. E. Whiting.

President Harris has been a zealous worker in Interstate League matters, and is the present treasurer of the New England Retail Druggists' Union. Secretary Leavitt was of course elected; this is the fourth year that he has occupied this responsible position. Some discussion then followed in relation to reviewing the initiation fee in order to increase the permanent fund, but the subject was finally laid over until next year. Prof. W. L. Scoville reported for the committee upon "Adulterations and Sophistications," and then read a paper upon "Chalk mixture." Papers by Fred T. Drake and John T. Manning

followed. That of the former was upon "Adulterations of powdered nuxvomica," and the latter dealt with "How to keep an Index." Over 125 new members were voted upon at this meeting.

In the evening came the annual banquet. It was held at the Bay Street House; music was furnished by Knowlton's orchestra. President Rice occupied a chair at the head of the table, and after the good things had been disposed of, introduced the speakers. Representative Rowe spoke for the "City of Worcester," President Canning for the "Interstate League," President Patch for the "A. P. A.," John T. Manning for "The Ladies," and James F. Geurin for "Our Invited Guests."

At the meeting of the 28th Prof. Patch submitted the report of the committee on "Papers and Queries." The instillation of officers followed, and it was then voted to adjourn to meet in Boston next May at the time of the holding the proposed Pharmacy Fair.

A pleasure ride about the city and to Lake Quinsigamond followed. Then came a sail on the lake. Returning, lunch was served at the "Lake Side Boat Club" house. The exhibits at this meeting were very attractive, but none occupied more attention or received more praise than that of the Massachusetts College of Pharmacy, which included all of the U. S. P. drugs and preparations and was arranged by the students of that institution. President Harris has made the following appointments:

Executive committee: J. Allen Rice, Milford; J. F. Geurin, Worcester; W. F. Sawyer, Boston, with the president and secretary ex-officio members.

Committee on legislation: C. H. Crane, Somerville; C. B. Emerson, Haverhill; A. K. Tilden, G. W. Cobb and W. F. Sawyer, all of Boston.

Committee on trade interests: J. F. Geurin and W. L. Davis of Worcester; G. C. Brock, Lowell; F. M. Pease, Lee, and F. W. Reeves, Cambridge.

Committee on papers and queries: E. L. Patch, Stoneham; W. L. Scoville, Boston; J. T. Manning, Pittsfield; H. S. Richardson, Concord; and C. F. Nixon, Leominster.

Committee on adulterations and sophistications: F. T. Drake, Stoneham; W. L. Scoville and S. A. D. Sheppard of Boston.

Committee on memberships: W. H. Willard and J. F. Smith of Worcester; J. T. Manning, Pittsfield; F. W. Reeves, Cambridge, and H. T. Viall, Boston.

Committee on local organization: Henry Canning, G. W. Cobb, W. C. Durkee, F. L. Carter and W. F. Sawyer, all of Boston.

It is a remarkable fact in botany that no species of flower ever embraces, in the colors of its petals, the whole range of the spectrum. Where there are yellows and reds there are no blues; when blue and red occur there are no yellows, and when we have blues and yellows there are no reds. Tulips come nearer to covering the whole range of the spectrum than any other species. They can be found ranging through reds, yellows and purples, but a blue one has never been found.

NEW YORK.

The marriage of Mr. Alfred Bickerton Evans, managing director of "Evans & Sons, Lim.," wholesale druggists, Montreal, to Agnes Reid, daughter of John Cassels, also of Montreal, took place on Saturday, June 28, at Erskine Church. The happy couple left for New York, and after a short stay sailed on the s.s. Teutonic for Europe, where they will remain some time. Before leaving Mr. Evans was presented with a very handsome grandfather's clock by the employés of the firm in Montreal, Toronto, Boston, Mass., and Victoria, B. C. This form of presentation was chosen because a grandfather's clock was always considered a link between the past, the present, and future, and they trusted that he might live long enough to relate to his grandchildren how he came possessed of the grandfather's clock. Mr. Evans in replying thanked the employés for their gift, but he valued far more the kindly feeling which actuated it. The establishment was closed for the day to enable the employés to do honor to the event.

William A. Beardmore, Ph.G., N. Y., C. P., 1889, who has been assistant apothecary at the Vanderbilt Clinic for some two years, has purchased the store at 384 Summit avenue, Jersey City, and has it handsomely refitted and opened under the title of the "Clinic Pharmacy." Mr. Beardmore's extensive experience and marked ability will no doubt bring him the success that he deserves. Dr. L. C. Corbin Ph.G., formerly apothecary U. S. N., who has recently graduated in medicine from the College of Physicians and Surgeons, Baltimore, succeeds Mr. Beardmore at the Vanderbilt Clinic.

Circulars advertising noxious medicines and implements have been numerous in Jersey City for about a week. They directed that orders should be addressed to the Scientific Remedy Company, Box No. 62, H. C. Station, Jersey City Heights, and United States Commissioner Romaine, to whom they were referred, decided that the mails were being used for illegal purposes. Recently a man who took the letters from Box 62 was arrested by a detective. He gave his name as Walter Belland, but refused to say anything further. The Jersey City police regard the capture as an important one.

Thomas A. Hedley, who has spent the last few weeks in this city in the interests of Evans & Sons, Ltd., of Montreal and Boston, has made a great many friends in the trade. Mr. Hedley has a marked advantage in the thoroughly practical knowledge of the business, which he gained by some fourteen years or so of experience in the laboratory of the firm before he took up the outside work. Mr. Hedley reports a rapidly growing appreciation on the part of the drug trade of the excellence of the "Monsterrat" lime juice, which is controlled by his house.

Otto Rauchfuss, of Seventh street and Avenue A, had a large surgical contract on his hands on the night of July 3, in the way of dressing the burns of a lot of small boys. The boys, after the manner of their kind, had invested their accumulated earnings in explosives, and while engaged in celebrating they accidentally set fire to their "tut" of powder, which in turn set fire to them. Mr. Rauchfuss almost exhausted his supplies of dressings and of caron oil, as five of the lads were severely burned.

G. M. Howell, an old time New York druggist, is now in entire charge of the

New York branch of the Low Art Tile Co. in the Havemyer building, Church and Cortlandt streets. He has been kept quite busy of late attending to numerous orders. A Low Art Tile fountain of unusual beauty of design has been placed in Hudnut's new store at 205 Broadway, while Geo. F. Spaeth, the well-known druggist of Long Island City, has invested in a particularly neat apparatus.

Harry Heller, the rubicund, jovial and inimitable secretary of the Alumni Association of the New York College of Pharmacy, has launched his by no means fragile craft upon the (stormy) seas of matrimony. [The parenthesis is the work of the bachelor member of our staff.—Ed.] Mr. Heller was married on Sunday, June 24, to Miss Anna Metzger, of this city, and every one of their many friends unite in wishing the newly married couple much joy.

*William M. Wisdom, a manufacturer of toilet articles, has been arrested on a charge of libel preferred by William C. Halleck of 304 West 139th street. Halleck was the New York agent of the Omega Chemical Company of Portland, Or., and he accuses Wisdom of bringing about his discharge by writing a libellous letter to T. O. Downing, president of the company.

Charles Magnum Weisz expects to leave on his annual fishing excursion about the 15th inst. He primarily had his arrangements made to spend his vacation in Maine, but learning that it was a Prohibition State he altered his plans to conform with his requirements. We trust he will find the air of Fulton County invigorating.

J. L. Hopkins & Co. have been compelled by the rapid growth in their business in crude and ground drugs, to remove from their former location at 14 Platt street, to more commodious quarters two doors further west at No. 16 of the same street, formerly occupied by the Vollman Spring Company.

Chas. G. Tomlinson, the well and favorably-known druggist of 102d street and Amsterdam avenue, died on June 16. Mr. Tomlinson located at 100th street and Amsterdam avenue nearly 28 years ago. By hard work he had built up a very large and lucrative business located at 102d street for the past eight years.

The Chalaum Salve Company of New York City have been granted articles of incorporation to manufacture a compound known as "Chalaum Salve;" capital, \$50,000. Directors: Samuel F. Page, George W. Prowdgers, and George Craft, of New York City.

James H. Redfield, a well-known wholesale druggist of this city, died suddenly in Boston on the 24th inst., presumably from heart disease. His body was sent to Clinton, Conn., his birthplace. He leaves a widow and two children.

Geo. M. Smythe, of J. M. Maris & Co., Philadelphia, was in New York, a few days ago attending the graduating exercises of the school of which his daughter is a student.

Isidor Schulkind has purchased from the estate of W. Duncan the West Shore Pharmacy, Forty-second street and Ninth avenue.

Percy Latham, the well-known representative of Billing, Clapp & Co., Boston, spent a few days in the city recently.

S. P. Watson, representative of W. H. Schieffelin & Co. in the South, is now in town for a few days.

Theodore Weicker, of Merck & Co., is enjoying a well-earned vacation in Darmstadt, the home of the parent house.

Dr. Peter M. Murphy, who so long and successfully conducted the pharmacy at 443 Broadway, Albany, died at his home in that city on June 27.

McClellan & Patton, formerly of 108 Manhattan avenue and now of 48 Maiden Lane, are giving their whole attention to the drug brokerage business.

Benj. L. Hume, the well-known proprietor of the Empire Syringe Co., New York, is spending his summer vacation as the guest of Col. Day, the publisher of *Town Topics*.

To increase the sales of his Sea Salt, A. J. Dittman, 4 Barclay street, is giving away with each 5 lb. box a glove shaped loofah. The loofah affords a pleasant method of applying friction and is a valuable addition to the requisites of the bath.

ILLINOIS.

CHICAGO, July 5.—The paramount condition that is commanding public attention is the strike, and like every branch of commercial industry, the drug trade is affected. Supplies are being cut off in all directions, and the emergencies that must be met are numerous and serious. At this time, however, when the Fourth has passed and disappointed the alarmists in a scarcity of accidents and little destruction of property, the situation has become much brighter. Railroads which gave evidence of a complete cessation of traffic are resuming business at the old stand. In the direction of the retail trade, the strike has proven a great benefit. Soda business means drug business, and during the troubles the streets have been thronged with men out of employment, but not inclined toward liquor. These men patronize soda fountains, and seeing something else wanted or needed at home, make a purchase which would otherwise have been overlooked. The suburban druggists have been reaping a harvest which nearly turned the heads of a few of them, and two or three became almost insane over the thought of their supply being shut off. This was due to the abandonment of suburban service by several of the roads, and the suburbanite remaining at home in consequence. The latter had nothing to do but celebrate, and the most popular place in the country town is the drug store on the corner. The suburban druggist has been doing a thriving business, but a serious danger menaces him. The cut rates have resulted in reducing the profits of the down town druggist, but give indications of proving fatal for the outside man. People in general are familiar with the situation and the cutting has become general, extending further and further each week. Even where they fail to advertise the fact, dealers are cutting to meet competition. The volume of business is practically the same as before the cut, with greatly reduced margins. The suburban or country druggist must command an unusually large trade to be able to get away from the legitimate profits of the business. The general cut reaches an average of 20 per cent. on everything, and the suburban druggist cannot stand

this. The result will prove disastrous to many unless the pernicious practice should be corrected. The general outlook, however, in down town retail circles is bright. The month of June, especially the latter part was exceedingly dull, but the month of July has opened with a vigor and strength going far to give promise of a profitable month. This is applicable to all departments, from the soda fountain to the prescription case, and is especially appreciable after a dull winter and spring. The wholesale trade is beginning to brighten up a little; although seriously affected by the railroad strikes, are able to fill all orders. No alarm is felt, though, as the trouble is looked upon now as waning, and things are adjusting themselves to the normal condition.

One of the greatest menaces to the public arising from the present congestion of railroad movement is that directed toward the drug trade. Although the bulky drugs are shipped into this market principally by water, all patent medicines and chemicals are ordered by fast freight. The supply in this direction has become very limited in the past few days, and even the more bulky drugs are becoming scarce, and it is becoming a serious question among the wholesale druggists of Chicago how to supply their outside customers. Even at this time orders have been canceled, and the dealers have been compelled to transfer the orders to some competitor, and everything possible is being supplied by express shipments. The country druggists are becoming alarmed at the reports made by the wholesale men of Chicago, and substitutes are being introduced whenever possible. The patent medicine and chemical trade is in bad shape, and should the strike continue much longer physicians and druggists will be unable to offer protection to the public health. On some of the staple articles for which there is a constant and general demand, the price has already advanced a little, and there is no telling what may be the cost of an ordinary dose of quinine should trouble continue.

The Ryerson Physical Laboratory, built at a cost of \$250,000, has been formally presented to the University of Chicago. The dedicatory services were held in the Undergraduate Lecture Hall of the second floor of the new laboratory. Dr. Harper announced the address of Martin A. Ryerson, the donor, amidst prolonged cheers. There were seated on the platform President Harper, Martin A. Ryerson, Prof. Carhart of the University of Michigan, Prof. Snow of the University of Wisconsin, Prof. Sylvester Burnham of Colgate University, and Prof. H. H. Donaldson, Prof. Samuel B. Stratton, and Prof. A. A. Michelson of the University of Chicago. Mr. Ryerson said, in conclusion: "Gentlemen of the Board of Trustees of the University of Chicago, I now tender to you the Ryerson Physical Laboratory to be the property of the University of Chicago, and to be used for the purposes which its name indicates. It is my intention to place upon its walls a tablet suitably recording the fact that it is erected in

memory of my father, Martin Ryerson, a man who in the struggle to overcome the material difficulties of life found time for intellectual growth and for thoughtfulness of the welfare of his fellow-men. I hope this laboratory will make a record as a result of his honorable and useful career. I have only to add that I value the opportunity which I have to aid in the advancement of the great science of physics, and at the same time erect a useful and lasting memorial to one whose memory I cherish."

The soda water business is not what it has been, and this summer the Chicago trade has been enigmatical. More people are imbibing the cheap drinks than ever before and less people are patronizing the fountain altogether. Men who have for years been steady patrons and always took a 10 cent drink now dodge in for a five cent drink, or remain away altogether. A prominent druggist, who operates one of the largest and busiest fountains in Chicago, expressed himself in pronounced terms the other day. He had no theory or ideas to offer, but consoled himself with the thought that the general stringency of the times had tied up so much money that the people could not enjoy their accustomed luxuries. The weather has been turning handsprings in such an uncertain manner that the soda water business has been injured through that influence.

E. R. Newcomb, who has been in the employ of Morrisson, Plummer & Co., as city salesman since 1882, died of consumption June 22.

Owing to the heat and the depressed condition of business, the regular June monthly meeting, of the Chicago Apothecaries' Society, was not held.

E. H. Buehler is making preparations for a fishing trip among the northern lakes. The time for departure is indefinite as trade is quiet, and Mr. Buehler does not want to overlook any possible business in his direction.

Owing to the stagnation of business few new stores are being opened, although a number of the younger men now engaged in operating the establishments of others have signified their intention of branching out for themselves this Fall.

A. H. Ramey, for many years in the drug business at Aurora, has applied for patents on a Castile soap cutter, which has been pronounced a success by Chicago druggists. Mr. Ramey some time ago secured a patent for a catarrh inhaler.

The establishment of the Indian supply depot, in Chicago, has caused considerable excitement in wholesale drug circles. The removal from New York of the warehouse was made on declarations that the Chicago market was as steady and low as any in the United States, in all commodities and supplies. It depended on the Chicago dealers to demonstrate this condition of things, and drug men made their bids down to bed rock. It has just been announced that at least one Chicago wholesale drug house has secured a contract for several thousand dollars' worth of drugs and supplies.

Ewing Smith, city salesman for Morris, Plummer & Co., has gone to Massachusetts on his vacation, to visit his distinguished father, the Rev. Dr. Smith, the author of the national hymn, America.

It is rumored that Dr. A. D. Lowell will soon establish a drug store in Rogers Park, making the third one in that pretty village. Dr. Lowell recently erected a building with store room and apartments. The post-office people came along and took the store room, so he is now building an addition, in which, it is reported, he will establish a drug store.

Wm. Henry Hall Dead.

William Henry Hall, of the widely known wholesale drug firm of Hall & Ruckel, New York City, died suddenly at Budapest, Austria, on Saturday, June 30.

Mr. Hall went abroad April 8, accompanied by his two daughters and youngest son. His two other sons were notified of his illness and sailed for Europe a week ago.

Mr. Hall was about sixty-five years old. He had been unwell for some time past. The immediate cause of his death was paralysis. Mr. Hall has occupied a prominent place in the Association of Manufacturers and Wholesale Dealers in Proprietary Articles, and was at one time its vice-president. His home was at 61 West Fifty-sixth street. He was a member of the University Club.

Cholera.

Cholera still prevails in Warsaw and its vicinity. There were 22 cases and 10 deaths in the city of Warsaw itself within the last five days of the date up to which intelligence has been received; 22 cases and 13 deaths in the government of Warsaw, and 11 cases and 6 deaths in the government of Plock have also been recorded in the space of a few days. Although the disease cannot consequently be said to prevail in Russian Poland to any great extent, it is nevertheless disquieting to learn that some 55 new cases and 29 deaths occurred there in less than a week.

Some cases of cholera have also occurred on the Prussian part of the Vistula, and it is announced that comma bacilli having been found in the water of that river near Dantzig, the police have closed the bathing establishments and forbidden the use of the water, while extra precautions have been taken in the way of sanitary supervision and preparation in the districts. The correspondent of the *Standard* states that Professor Koch had gone to Dantzig to confer with the local authorities and inspect the localities where cases of choleric disease had occurred.

The persistent manifestation of this disease in Brittany is a noteworthy fact to which we have already called attention. The Paris papers deny that France is threatened with an epidemic of cholera, and it is stated that Professor Netter had failed to discover any trace of Koch's bacillus in a few fatal cases of cholera which had occurred.

As regards the late epidemic at Lisbon it seems to have been now established, as stated in *The Lancet* at the time, that the disease was not cholera. A great deal of unnecessary alarm and mischief was created by statements to the contrary. The disease was not fatal, and was not bacteriologically identical with cholera.

PENNSYLVANIA.

PHILADELPHIA, July 9.—Midsummer comes a little earlier in this city than elsewhere, it seems, for people begin to leave for out-of-town resorts after May begins to advance, and by the time the Fourth of July has arrived, sections are almost depopulated. All of this exodus means much to the urban pharmacist. It means in the first place that he is to be deprived of the patronage of regular customers from one to three months, and when they do return how distressingly healthy everybody is. The drug business in Philadelphia during the heated term is increased in volume from those unfortunates who stay at home, and, in many stores, prescription trade booms. The principal reason for this may lie in the fact that the city is one of the hottest in the country, not only because of the prevalent high degree, but the depressing humid atmosphere intensifies the misery. So the poor babies suffer, and delicately nurtured adults succumb, and the doctors find plenty to do. And it is this prescription trade that naturally helps to balance things, and make up for the absence of those who have fled to mountain and seashore. The weather is good for the sale of sundries, and the shrewd pharmacist who has learned where and how to buy such goods can earn a good profit in disposing of them. The display of sponges for the toilet is larger than ever, and, while the average quality may not be as fine, the article is serviceable and good enough for the purpose. Prices are reasonable, especially when the short supply of Florida goods is taken into account.

The advent of warm weather has caused a merry whiz and a hissing sizz in nearly all the drug stores of this city. During the last week there has been a big demand for cooling drinks, and the druggist who has not been enterprising enough to have a soda water fountain has lost considerable trade. The soda water fountains have had a run on them, and judging from the state of the thermometer at the present writing there is no possibility of the demand ceasing for some time to come. During the last few years the soda fountains in this city have played a prominent part in the fitting up of a drug store, and instead of the old style goose-neck fountains there are a number of sumptuous ones, which are used as an advertisement by the wide-awake druggist. The soda water counter of George B. Evans on Chestnut street, west of Eleventh, is constantly crowded with customers, and to the sale of soda water the success of his business in a measure is accounted for, for with it the thirsty customer sees the interior of the store, and to see it is to purchase something. This druggist is one of the most enterprising in the city, and he frequently advertises himself by having his show windows filled with some novelty. He has secured the building next door, and he is using the windows to show off his wares. The soda water trade is like a golden harvest. People flock to popular fountains in droves to quench their thirst. No very new or original drinks have been offered as yet; perhaps it is too early in the season, or the adver-

tising agents may be a little behind-hand. "Moxie," now almost a memory, is sold here and there, but there is no wild rush for it, or any substitute in the affections of the people. Pharmacists have not been so much on the lookout for novelties at the fountain as to maintain and improve standard flavors. It is a fact that to-day there are more stores dispensing genuinely acceptable soda water than at any previous time.

The retail druggists here have recently paid more attention to dressing their windows than ever before. This is especially so since the jobbers and retail dry-goods houses have been selling such articles that were formerly considered to be the property of the druggist. There is hardly a dry-goods house of any size in this city that does not sell perfumes and the various powders that are essential to a lady in her toilet. If they sold these goods at a reasonable profit the druggists would not object, but many of the dry-goods houses use these articles as an advertisement, and frequently sell the perfumes, etc., at a price a little above cost, and in some instances at cost. This has naturally hurt the trade of the druggist, and he is endeavoring to get the trade back which was once exclusively his. To do this, he has awakened to the fact that he must make his windows as attractive as his competitor, and in order to accomplish such a change the old style bottles with their colored waters are being put aside, and fancy bottles which are illuminated by electricity are being used instead. There are also other innovations, which all help to give the exterior of a drug store a pleasing appearance.

The trade in this city is very dull, and the retail druggists are getting more than their share of bad business. In the early part of the month there was a slight improvement caused by the annual cholera scare, and a number of druggists who had on hand a large stock of disinfectants were enabled to dispose of a big amount, but outside of this there is very little to mention in connection with the retail drug trade. Many of the druggists have made preparations to take a short rest, but it is now thought that the vacations will be limited owing to the bad business of the present year.

The Distillers' and Cattle Feeders' Company keeps the dealers in alcohol busy watching the next move of the trust. This corporation is universally disliked, and whenever anything can be done to hamper it, it is done without any compunction. The trust has ruled the trade with a hand of iron, and whenever it thought any of its buyers were getting their alcohol from another source, then a notice would be issued notifying the accused that they had forfeited all rights to any rebates. This was the case with the Smith, Kline & French Co., but this firm would not surrender what it justly considered its rights, and brought suit against the Distillers' Co. for the amount of its rebates. The matter was taken to Court, and on June 29 the counsel for the Smith, Kline & French Co. entered judgment against the Distillers' and Cattle Feeders' Company for \$2,995,63. for want of an appearance.

The counsel also filed an injunction against the trust. The cause of this suit was that the Smith, Kline & French Company determined to stop selling the sale of alcohol in large lots, and all the orders they got for this article they delivered to another party. The orders for alcohol by this drug firm were very large, but when they made the new step they fell off to a few barrels a month. The trust then decided that the drug firm was not living up to its agreement with it, and notified them that they would not receive any rebate; the consequence being that the matter was taken to Court, and not only this firm is looking anxiously forward to the conclusion of the suit, but all the other dealers in alcohol who were compelled to purchase from the Distillers' Company.

The Charles E. Hires root beer company is filling more orders this year than ever before. This beverage is now kept by nearly all the drug stores in this city, who make a specialty of it. The present manufacturing plant of the company is not large enough to meet all the requirements placed upon it, and there is some talk of the plant being moved to a larger building. This company has opened a store on Chestnut street, East of Eleventh, where the beverage is dispensed to the over-heated and thirsty wanderers by two very pretty ladies. Whether it is the liquid or the young ladies that causes such a rush, it is nevertheless true that to be in the swim it is the proper thing to drop in the store during the late hours of the afternoon and sip a glass of beer.

The Gorman tariff bill which has just passed the Senate by a small majority, and is now at this writing in the hands of the House, is being anxiously watched by the Philadelphia druggists, as in it there are several measures that will greatly affect their business. The principal item at the present time is the schedule that pertains to alcohol. As the bill came from the House there was levied a \$1 tax on every proof gallon, but the Senate increased this tax to \$1.10, and making it take effect on the passage of the bill, while the House schedule goes into effect two months after the passage of the bill. If the bill passes as it now stands it will increase the price of alcohol to the dealer 38 cents for every wine gallon, but if the schedule as in the original bill is adhered to, the increase will be about 18 cents for every wine gallon. As the bill now stands it goes into effect at once, which will prevent the laying in of a larger stock of alcohol; besides this, none of the holders of alcohol will sell large quantities, it being very hard to secure more than than one barrel at a time.

In connection with this the amendment of Senator Hoar to exempt all alcohol used in the arts and sciences from duty is considered quite impracticable, as there is not the element of equity about it that there should be. This amendment if carried out would give the trade almost exclusively to the large and wealthy manufacturer. To get at the bottom of the matter it is proposed to place in the hands of the Secretary of the Treasury the power to carry this law into effect, and for him to do so he would have to exercise a general supervi-

ion over all manufacturers that use alcohol, to see that it was not used for any other purpose than that specified. To do this the secretary would be compelled to establish bonded warehouses in the various chemical and medical establishments where alcohol is used. This would be in a measure all right to those that could afford it, but the small manufacturer and the retail druggist who handles only small lots of alcohol, it would be a hardship as well as an impossibility, besides giving the already rich concern more power over the poor one. Some years ago when Philadelphia was represented in Congress by Samuel J. Randall, it was proposed to the Drug Exchange in this city that if they would draft a bill for the exempting of alcohol he would try to get it through Congress. The matter at that time was taken up, and after a thorough going into it was deemed impracticable, as it was found that each dealer in alcohol would be compelled to have a bonded warehouse on his property, or in other words the Government was to be given the right to the freedom of the establishment. Rather than to do this it was decided that it would be better to pay the tax. The wholesale druggists are of the same opinion now, and they cannot see any way out of paying the tax.

The passage of the tariff bill and its signature by the President is being rather anxiously waited for by some of the local dealers in drugs who have bought stocks of morphine and opium, in anticipation of its appreciation. These drugs have been held for quite a few months, and it is said that holders are ready to secure the profits of which they have been dreaming.

This is the finest section in the world for pasture and good butter, but, in spite of natural advantages, oleomargarine crops out in quite a number of places as an article from the cow. A second prosecution of violators of the law was made last week, and the \$100 fine was imposed. Dr. Leffman, the noted chemist, made tests on the suspected samples. Many of the defendants said they had been imposed on, as the article had been purchased as butter. Dr. Leffman then gave them a test to distinguish between oleomargarine and butter, saying that a little butter placed in a tin cup and held over a gas flame will foam as it melts, but the oleomargarine will have a salt formed on its surface and then sputter.

Governor Pattison has re-appointed A. G. Tafel, of this city, a member of the State Pharmaceutical Examining Board. Mr. Tafel represents the homeopaths.

The recent death of M. Chievas, a French chemist, in an asylum near this city, showed the end of a career in which genius and fortune played important parts, involving the expenditure of millions and the conception of enterprises on an enormous scale. Mr. Chievas, after disappearing from the firmament of science in which he shone with brilliant but meteoric force, lived in a tenement house at Fifth and Vine streets, in apartments which rented for \$8 a month.

In 1871, a young Frenchman visited Richard Biggs, the New York repre-

sentative of an extensive New England carpet manufacturing establishment. He was plausible of conversation with perfect manners, and introduced himself to be M. Chievas, a textile chemist from Lyons. He said he was an expert in dyeing, and claimed to have a substitute for madder that would revolutionize trade in that line in America. Finally an impression was made on shrewd Mr. Biggs, who became interested in the chemist's ideas, and a meeting was arranged with leading textile experts. There it was made plain that M. Chievas understood his business, and was no imposter. Three thousand dollars were raised to test his formulæ. M. Chievas went into a laboratory, aided by an assistant, and with a dozen bottles of extracts made a deep scarlet and an old gold color that American manufacturers said were new to them. A syndicate was formed without delay. The new process, it was promised, would cause a saving of 80 per cent. over old methods. The young inventor received \$100,000 for his receipts, and was paid a salary of \$6,000 a year to superintend the plant. Then M. Chievas began to get rid of his fortune. In reckless manner the \$100,000 was dissipated, after which he wanted another bonus from the Company. This was refused, and he quarreled with those over him, leaving the place. The Company had the formulæ, but, to the dismay of those who tried to use them in the way the Frenchman had done, they only failed, although his work had been done before their eyes. After sinking \$400,000, the new process was abandoned.

M. Chievas was resourceful. He interested a wealthy steamship man named Dimick in a scheme, and also a woolen manufacturer, and both came near being ruined as the result. After that Chievas left the East, and when again heard of it was in connection with an enterprise for extracting gold from quartz in California gulches. Flood and O'Brien, the millionaire miners, being financially interested. Later on, the daring Frenchman formed a company to work Chilean nitrate beds, and a million dollars was subscribed for the purpose. When again at a loss for something to do, he taught chemistry lessons, having squandered the fortunes his genius had brought him. Eight months ago in company with his wife, he came to this city and took rooms on Vine street. When he died he was a pauper.

C. A. Eckles of Sixth and Vine streets has sold his store to P. G. Easkin, who has been his chief clerk for some years.

H. C. Frederick, formerly of West Philadelphia and recently of Tenth and Green streets, is now traveling for Hance Bros. & White.

The Delaware Pharmaceutical Association has offered two prizes, one of \$20 the second of \$10, for the best essays to be read at its annual meeting in May, 1895.

Richelle & Co., Thirteenth and Market streets, Philadelphia have disposed of their store to J. M. Hillen of Shenandoah, Pa. Mr. Richelle will in future devote his attention to the manufacture of his specialties, which have already attained considerable reputation.

George A. Gorges, one of the leading pharmacists of Harrisburg, Pa., is now established in new quarters which are handsomely furnished and well equipped for business purposes.

J. Palmer Rothermel, who formerly clerked for Charles H. Clark (at 36th and Race streets) has gone to Lewiston, Pa., to manage the pharmacy established by the late A. P. Martin.

Joseph S. Beetem has sold his drug store at Seventh and Market streets, Wilmington, Del., to Joseph C. Roberts, Ph.G., of Philadelphia, and Richard S. Dripps of Coatesville, Pa.

Hackett, Marshall & Co. have resumed the manufacture of druggists' specialties at 27 North Second street. They will make a specialty of non-secrets and would be pleased to submit samples and prices to the trade.

Special treasury agent G. W. Whitehead last week seized fourteen pounds of the costly drugs phenacetine and sulfonal, which, he alleges, had been smuggled into the United States from Canada. They had been sent, he says, by a well-known drug house in Toronto, Canada, to E. A. Kingston, a large retail druggist in Buffalo, N. Y., who in turn sent them to the drug manufacturing plant of the H. K. Mulford Company, No. 2134 Market street, where the seizure was made. Milton Campbell, a member of the Mulford Company, says that the drugs were sent to them to be manufactured into compressed tablets and returned to E. A. Kingston. Such work is part of the Mulford Company's regular business. The company, he added, had had business transactions with Mr. Kingston for the last five years, and they promptly notified him by telegraph of the seizure. Agent Whitehead locked up the seized drugs in the seizure room in the United States Appraiser's stores, No. 121 South Second street.

William R. Warner, the senior member of the firm of William R. Warner & Co., famous for pharmaceutical preparations of all kinds, is a traveler of wide experience. He has been in Europe recently, spending much time in Italy, and the voyage made his twenty-first trip across the ocean. The firm received a silver medal at the recent International Medical Congress at Rome for its superior pills.

Hance Bros. and White, pharmaceutical chemists of this city, have had a book published in attractive form on "How to make a Drug Store Pay Better." It certainly treats on a subject which is a live issue with many pharmacists. Much hard sense is presented. It says, among other things: "A druggist has the chance to better himself as almost no other tradesman has. The way is peculiarly open. In other professions and businesses a high degree of success is fairly common; in drugs it is extremely rare. Not because of any difficulty in the business itself, but because the druggists do not happen to see how easy it is to make more money with the start they have got. They do not see the way to do it, because they are looking in the wrong direction for it."

Points on location and arrangement

of the pharmacy are given, together with the character of the trade which is desirable and that class found to be unprofitable. It is hinted that the pharmacist should not become so high a professional man that he overlooks honorable business opportunities. Liberality towards customers is urged, and it is clearly stated that the pharmacist and his assistants should always be ready to render some slight gratuitous service to callers. There is much wisdom in this little book, especially for a young man whether he be employer or clerk.

The manufacturers, Chapman & Rogers, 510 Arch street, made a decided hit on the evening of July 3d, which was the celebration of the hundredth performance of the new opera "Princess Bonnie" at the Chestnut street Theatre. They had four handsome gentlemen of color stationed in the lobby in full evening dress, who presented to each patron a sample bottle of "Princess Bonnie" perfumes mounted on a handsome gilt-edged souvenir card. The new odor is delicate, fragrant and lasting, and even without such an attractive name would soon become popular.

MARYLAND.

BALTIMORE, Md., July 8.—The pharmacists of Baltimore were among the first to consider the advisability of a law to regulate the practice of pharmacy in this country, and as far back as 1870 succeeded in having a law passed applying to Baltimore; yet we have never succeeded in having a general State law enacted, while some of our newer sister States, particularly through the West, have State laws that seem to give satisfaction. The first law, as framed for Baltimore, was not as satisfactory as had been expected of it, and after wasting an amount of time and energy in trying to get the Solons at Annapolis to pass a law for the State at large, they were forced to compromise on an improved law for Baltimore. Under the active operation of this last law a higher standard of qualification is being maintained, and the law is undoubtedly having a good effect. The standard of the examining board may be surmised when their report show that of the candidates for examination, since the passage of this act in '92, over 45 per cent. have been refused their certificates. The law makes it requisite for a registered pharmacist to be in charge of each and every store under penalty of a fine of \$50 per week for non-compliance with this act, and has required that the State's Attorney has charge of complained cases, thus relieving the board of the trouble and worry of prosecuting the offenders. The present board, lately appointed for two years, consists of Prof. D. M. R. Culbreth, M.D., president; John F. Hancock, Ph.M., secretary, and Thos. L. Richardson, Ph. G., treasurer. Mr. Richardson taking the place of E. Eareckson, M.D., who served on the old board with the first two named gentlemen, and who lately resigned. The board meets the first and third Tuesday of each month for examination. This month the successful candidates were

Stanly M. Stuart and Frederick C. Ruths. F. C. Ruths takes charge of the newly opened Clifton Pharmacy, corner of Chase and Gay streets.

Louis F. Sherman has bought the store of Dr. E. M. Bonner, corner Front and Baltimore streets.

Dr. E. M. Bonner has opened a pharmacy at Carey and Baltimore streets.

J. Chas. Smith and wife are summering in their country home, near York, Pa.

John H. Hancock will shortly go to Atlantic City for several weeks' vacation.

Mr. Walz will retire from the drug business and go in the real estate business.

Chas. E. Sonneburg & Co. have bought the old stand corner of Baltimore and Green streets, formerly owned by Dr. E. J. Perkins.

Chas. L. Meyer, formerly with Dr. L. C. Horn, has bought from J. Lee Walz the pharmacy corner of Madison avenue and McMechin streets.

Have you tried assayed denarcotized opium for making the denarcotized tincture? If not, write to Gilpin, Langdon & Co., Baltimore for a free sample of the drug with directions for using.

The Maryland State Pharmaceutical Association seems to be in a dormant condition, but its friends hope to revive it in the Fall. This they should do, as the good effects of such an organization cannot be overestimated.

The Alumni Association of the Maryland College of Pharmacy is in a very flourishing condition; its recent meetings have been well attended, and it bids fair to be a more popular organization with the pharmacists than heretofore.

John Purcell Dead.

John Purcell, one of the oldest, staunchest and best-known of Richmond's native citizens, and an old time member of the National Wholesale Druggists' Association, died at his home in Richmond on Friday, June 29.

He was seventy-eight years of age the 30th of last April, and all during his long and useful life he had lived in the city of his nativity.

Mr. Purcell first started in the drug business, when quite young, with Dr. Tompkins, a well-known druggist of that day, as his clerk.

He subsequently went as a clerk in the drug firm of Alexander Duval & Co. He was soon taken into partnership under the style of Duval & Purcell.

Some time later, in the year 1842, he withdrew from that firm and formed the copartnership of Purcell, Ladd & Co., wholesale druggists, which firm has remained unchanged in name to the present day.

The firm was then composed of John Purcell, Benjamin F. Ladd and James P. Purcell.

Mr. Purcell early in life married Miss Martha Webb, daughter of Commodore Webb of Norfolk, and she and four children survive him. They are Colonel John B. Purcell, Benjamin L. Purcell, Mrs. Thomas H. Leary, Jr., and Mrs. Alfred Gray.

MASSACHUSETTS.

BOSTON JULY 5.—"This store will close all day Sunday" is a sign displayed in Dedham drug stores on Sundays. This is the result of a special meeting held by the selectmen of that town, at which the police were instructed to enforce the Sunday law. It is understood that this action was brought about by jealousy. It seems that the electric cars have developed a large number of "railway waiting rooms" in that town all of which did a thriving Sunday business in the sale of soda and cigars. The business developed to such an extent that the police notified the proprietors of these establishments that they could accommodate the public all they pleased on the Sabbath day, but not to the extent of selling goods. Then a clamor immediately arose about the Sunday business of the druggists, and the police, to be consistent, notified the latter that they too must close, or else run the risk of prosecution. After this notice the drug stores were open one Sunday for the sale of drugs and papers, as allowed by law. An amusing incident arose on this day. One of the selectmen went to a drug store and called for a cigar; he was not accommodated, and in consequence became very angry. One Sunday of legitimate drug business was enough for the Dedham proprietors, and so they decided not to open in the future on the Lord's day. At least that is their announced intention. Druggist Smith, of East Dedham, has usually been closed the most of the time on Sunday anyway, and now all of the druggists of the town profess to be pleased by their action in closing.

Woburn has added another chapter to the history of attempts to close drug stores on the Sabbath in this State. But the result in this case stands conspicuous because its parallel cannot be found. Here the chief of police on his own authority notified the druggists that they must discontinue all Sunday business excepting that allowed by statute. This action on the part of the chief highly incensed the mayor, who, on the very day that the order was given, called the chief before him and after a stormy interview suspended him from further duty. In this action the mayor has been sustained by the board of aldermen. The step taken by the mayor cannot be looked upon, however, as being especially favorable to the druggists, but was simply the culminating point of numerous differences between the two officials. Hearing that the chief had been shorn of his power, the druggists kept open as usual, and were not interfered in any way in their business. A similar attempt at Sunday closing was made four years ago in Woburn, but like other movements of this kind it met with a complete failure. Some of the druggists of that city are much pleased at the outcome, and say that they will continue to keep open until new closing orders are issued.

A reaction has already set in out in Everett over the mayor's action in not permitting the drug stores to sell anything but drugs on Sunday. This was made apparent at a meeting of the aldermen of that city, when a resolve was unanimously adopted to the effect that, in the board's opinion, it was unwise for the mayor to issue an order restricting Sunday sales by druggists to medicines only; also that it was deemed unwise to attempt full enforcement of the Sunday laws, the same being against public opinion, and for the interest of good government in the future the mayor was requested "to revoke said order, or in some way modify

the same, so that the druggists of the city may be enabled to sell certain articles which are considered by the public generally as a necessity." Three of the aldermen made speeches upon this subject. One claimed that a number of good citizens had removed from the city since the order was issued, and certainly no liberal minded persons would move in under the existing state of affairs. Another said the druggists were all respectable citizens, and conducted their business in a proper manner. The third claimed that the members of the city government were the representatives of public opinion, and he believed a majority of the people of Everett desired the drug stores open on Sunday.

A peculiar case occurred in Somerville a few days ago which has been productive of much discussion. The affair began in the arrest of Harry Niles, 14 years old, employed as clerk by F. H. Willard, Somerville avenue. Mr. Willard has another store in Cambridge. Young Niles was arrested because he had in his possession a bag containing eight bottles of ale, which he was transporting through the public streets. The complaint was for a violation of chapter 100, section 17 of the public statutes, which reads: "No person shall bring into a city or town in which licenses of the first five classes are not granted any spirituous or intoxicating liquor with intent to sell the same himself or to have the same sold by another, or having reasonable cause to believe that the same is intended to be sold in violation of the law, and any liquor transported contrary to the provisions of this section shall be forfeited to the commonwealth, but this section shall not apply to the transportation of spirituous liquor through a town to a place beyond."

Any violation of this section is punishable by a fine of not less than \$50 and not more than \$500, or by imprisonment for not less than one or more than six months, or both such fine and imprisonment. At the trial the police alleged that Niles was in the habit of making two trips each day to Cambridge with the bag in question, and the store where he was employed was not given a very good reputation. For the defense, proprietor Willard said that he would not allow liquor to be sold in the store, and was not aware that it ever had been. Judson A. Wicker testified that the ale was for himself and a New Hampshire friend who was visiting him; he also said that he went to Mr. Willard's Cambridge store a day or two before the arrest and before he left placed the ale and some drugs in the grip, which Niles subsequently brought to Somerville. The defendant testified that he did not know that he was carrying liquor in the bag, and never knew any to be sold in the store. He admitted that he had brought a jug once or twice from Cambridge. The result was guilty. An appeal was taken from the \$50 fine.

Hon. Gorham D. Gilman of Gilman Bros., 50 Franklin street, has been appointed Hawaiian consul for the port of Boston. Of Mr. Gilman's fitness for this position much can be said. He has an experience of 20 years on the islands and an acquaintance with people in all spheres of life. During this period he visited every inhabited island of the group. Mr. Gilman has taken an active part in the affairs of this State also. He was a representative in '89 and '90, and State senator in '91-'92. He is a staunch supporter of the provisional government of Hawaii, and has become well known in connection with these islands, both by his pen and

by the illustrated lectures which he has given so many times of late.

The Massachusetts Board of Pharmacy will be in new quarters when fall examinations commence. The address of the board after Sept. 1 will be State House Annex, Rooms 21 and 22. No more examinations will be held this summer, but the new law on the license question will necessitate frequent meetings during the heated term. At the last examination 44 candidates were examined and certificates were granted to Napoleon Rogers of Haverhill, John Toye of Cambridge, Rosario E. Longtin of Holyoke, Alexis Anctil of Manchester, N. H., Frank G. Johns of Holyoke, Joseph H. Beauvais of Cambridge, and Homer F. Dickenson of Springfield.

The police of Salem recently raided two drug stores in that city. One of the stores was kept by Dennis F. Hartnett, and there they confiscated five full kegs of whisky, a keg of alcohol, bottles of whisky in a barrel, and seven empty kegs. In Charles Shea's place six full kegs of beer, two boxes containing bottles of beer, three barrels containing bottles of beer and four empty kegs were seized. After these raids the aldermen of that city met and considered the question of granting licenses to druggists. There were no applications before the board, but a resolution was presented to the effect that the board deemed it inexpedient to grant any sixth class licenses for the present municipal year.

A vote on the matter resulted 4 to 1. One of the members was excused from voting, as he was himself a druggist.

These are busy times with the Low Art Tile Co. Recent purchasers of their fountains are W. E. Warren, Kennebunk, Me.; Clark and Nutton, Somersworth, N. H.; C. W. Hicks, Wolfboro', N. H.; M. D. Fisher & Co., Boston; A. P. Preston, York Beach, Me.; L. B. Hubbard, Plymouth, Mass.; Herbert Burke, Malden, Mass.; G. K. Mountain, E. M. Spicer, and E. S. MacDonald, all of Boston. Other Massachusetts dealers are S. D. Wardsworth, Plymouth; S. M. Harmon Marshfield; E. Nutting, Sterling; and E. E. Poore, Lawrence.

At the annual meeting of the Mass. Medical Society held recently the most attractive exhibit was that made by the Mass. College of Pharmacy. This display contained all of the crude drugs and preparations of the U. S. P., '90, and was arranged by the students of the school above mentioned. It was proposed that this exhibit be taken to Worcester where it could be seen by those in attendance at the meeting of the M. S. P. A.

The store of L. L. Atwood, Pittsfield, was robbed in the night recently of \$70. Suspicion fell on James H. Nolan, a New York drug clerk, who was spending his vacation in that city. Nolan formerly worked for Atwood, and it is claimed that his discharge was due to his thieving propensities. Nolan denies his guilt, but the police are confident that they have the right man.

Victor Taliereti of Montreal was a recent visitor to the Hub. While here he inspected the warerooms of J. W. Tufts & Co., and before he left had purchased a large double fountain for use in his store at the corner of St. Aubin and Ontario streets.

C. H. S. Wilbur has a new store at Salisbury Beach, and J. H. Carpenter has opened a new establishment at Atlantic. Both are fitted with Low Art Tile fountains.

Fred A. Barker, of Gloucester, Mass., has recently made many improvements in his store on Main street. J. W. Tuft of Boston, has supplied him with a handsome soda fountain imported from Belgium, and made from the finest of Belgium marble, surmounted by a handsome light of pale glass studded with jewels, while C. H. Bangs of store fixtures fame has made for him a mammoth double mahogany prescription case.

The first case under the medical practice act has just been tried and has resulted in a conviction. The "Dr." was a female and the fine was \$100. It was proven that she had prescribed medicines, not having registered in accordance with the law.

The Low Art Tile Co. have recently sold the first special large fountain ever made by the concern, the value of which was \$3,000, to J. W. Irving, Bridgeport, Conn.

P. J. Maguire, representing J. W. Tufts & Co., has just returned to the Hub after a successful business trip through New Hampshire.

A bill to prohibit the sale or manufacture of cigarettes within the commonwealth has been passed to be engrossed.

G. R. Hinckley, Brockton, is the proprietor of a new store. His fountain is of the Low Art Tile pattern.

Walter A. Claffin of Cambridge is a recent purchaser of one of J. W. Tufts & Co.'s improved fountains.

Rief and Silver, Manchester, N. H., have equipped their new store with a Tuft's fountain.

CONNECTICUT.

Dalzell and Belcher, New Britain, have opened a new store; the fountain was made by the Low Art Tile Co.

Herbert Church, proprietor of the L. W. Booth & Co. store, Bridgeport, Conn., is very ill at his home in that city.

Wm. H. Watson, who has just graduated Phm. B. from the Ontario College of Pharmacy, is now with Elbert E. Fisher, Bridgeport, Conn.

A new store has been opened at New Haven by B. A. Turner. A Low Art Tile fountain occupies a conspicuous place in this establishment.

A. Marwick, Jr., is the successor of W. R. Chaffee & Co., 377 Asylum street, Hartford. A new Low Art Tile fountain is one of the additions made by Mr. Marmick.

S. W. Smith, Ansonia, has been appointed a member of the Connecticut Commissioners of Pharmacy, vice Charles Rapelye resigned. E. A. Hough, Collinsville, was first appointed, but refused on account of being postmaster.

The George Hughes Drug Company of Jacksonville is preparing to reopen at the old stand formerly occupied by Mr. Hughes at the corner of Bay and Ocean streets. The fixtures in the store, which were purchased at the assignee's sale on June 3 by Joseph Durkee, will be taken out and the store will be refitted with oak counters and shelving. Mr. Hughes will remove his stock of drugs and fixtures at the Opera House Pharmacy to the Bay street store and consolidate the two.

The following quaint order for sulphur candles was handed to Sayre & Pringle by a customer the other day. It reads:

"Seabury's sulphur candles—disinfecting and death to all animals from a chimpanzee to a nigger."

MICHIGAN.

DETROIT, July 5.—In the last fortnight business in Detroit and vicinity has materially improved, due no doubt to the hot weather. In certain lines merchants have been surpassing the records for more prosperous years. There seems to be no reason in the way of a general revival but the tariff question, and that will probably be settled shortly. The great Pullman strike has had a detrimental effect.

The drug trade is in a healthy condition. Soda fountains are worked from morning until far into the night, and the large amount of sickness in the city has favored the trade. During the small-pox scare some 100,000 vaccine points were sold, which has been stimulating in effect. Everybody has hung out cut rate signs, but little if no difference has resulted. Patent medicines are the only lines effected.

J. B. Young, Detroit, has obtained new quarters at 750 Grand River avenue.

J. P. Halls, of the west end drug store, Windsor, was recently married to Miss Lillie Hatch.

John E. Gibbs & Co. have purchased the stock of H. E. Girard, 120 Monroe street, Grand Rapids.

Dr. Riopells' drug store at 153 Canfield avenue, Detroit, was damaged by fire last week. Loss \$800. Insured.

The drug firm of Gidley & Boltze, Ellsworth, Mich., has been dissolved. R. Gidley will continue the business.

The drug store of Charles Weeks, at Augusta, has been robbed of a large sum of money and a quantity of stock.

The *Detroit Journal* recently published an excellent likeness of F. K. Stearns, president of Frederick Stearns & Co.

The wife of W. F. Jackson of Detroit, died recently. The remains were interred at her old home, Ann Arbor, Mich.

Abraham Greenfield, Detroit, has transferred his stock of drugs at 454 Rivard street, to Moses Stere. Consideration \$300.

The drug and grocery firm of Dunlap & Company, at Springport, Mich., was last week closed up by parties from Eaton Rapids.

Muir & Company of Grand Rapids, Mich., have enlarged the capacity of their store by putting in a mammoth onyx fountain.

R. H. Elliot, a prominent druggist at Pontiac, died recently. He was 56 years of age, and had been in the business many years.

The employees of Park, Davis & Co., held their annual picnic not long since at Sugar Island. Over 1,000 people enjoyed the fun.

W. H. Burk, of W. H. Burk & Co., was in Ann Arbor last week on business and to attend commencement exercises at his Alma Mater.

Charles Barfoot, a young man employed at Williams, Davis, Brooks & Co., fell down the elevator shaft. He smashed his skull and died a few moments afterward.

Harry Longwell, of the firm of Longell Bros., Paw Paw, Mich., druggists, died last week at Martinsville, Ind. He was one of the most prominent and well-known business men in that city.

A clerk in the drug store of Thomas Slattery, Benton Harbor, accidentally dropped a lighted match into the showcase window filled with fireworks. About \$300 worth of goods were destroyed.

The penny-in-the-slot machines which were on the cigar counter of nearly every druggist were recently declared gambling devices, and ordered removed. Their disappearance has been quite general throughout the State.

T. H. Hinchman & Sons, wholesale druggists, are again back in their old quarters in Jefferson avenue. While many familiar things are missing the firm express themselves as well pleased to be back again. They were burned out several months ago.

Frederick C. Reame and James M. Carmichael have secured an injunction from the Circuit Court restraining Daniel O'Leary, Edward A. Waterfall, W. P. and J. W. Doty from selling or disposing of the stock of drugs at 284 West Warren avenue, Detroit.

Stanley E. Parkill, Secretary of the Board of Pharmacy, reports that at the examination held last week at Star Island, 83 candidates presented themselves for registration as registered pharmacists and eight for assistant pharmacists. The following first-class certificates were granted: L. D. Bates, Burnside; M. Benjamin, Detroit; E. L. Bridges, Rochester; W. B. Lusen, Pontiac; J. L. Tegarten, Ann Arbor; A. B. Thompson, Hudson; D. L. Treat, Adrian; H. B. Ward, Detroit; and S. Zeller, Sault Ste. Marie. Assistants: D. L. Livingstone, Detroit, and E. E. Sherrard, Detroit. The next meeting of the board will be held August 25 at Houghton, Mich.

The School of Pharmacy of Michigan University in Ann Arbor held their class day exercises last week. This is the first class day ever held by the pharmacists, and the class of '94 feels no little pride over the innovation. There are 65 students in the school and 25 graduates in this year's class. The following were given diplomas: R. S. Armstrong, C. E. Burnhart, A. W. Epley, Lovell Farnum, S. R. Knox, J. C. Maxwell, J. C. McGregor, Grace E. McNoah, A. H. Mead, T. E. Murdock, Marion F. Nichols, Delia O'Connor, F. L. Robertson, James Seymour, G. C. Steventon, J. L. Tegarten, C. O. Topping, C. H. Williams, P. E. Wise, L. D. Havenhill, master of pharmacy.

Frank C. L'Hommedieu, of the firm of Bassett & L'Hommedieu, died of consumption at his home, 105 Alfred street. He was 44 years old. He was born in New York and came to Detroit in 1869, and entered the employment of the wholesale drug house of Farrand & Sheley, afterwards Farrand Williams & Co. He remained there until six years ago, when he became associated with Mr. Bassett. His health began to fail in 1892, and much of his time has since been passed at Tucson, Arizona, in an effort to restore it. Hope was abandoned last month, and he returned home. Mr. L'Hommedieu was married ten years ago. Three children and a wife survive him. He was widely known in business and society circles, and was a member of the First Presbyterian Church Society.

OHIO.

CINCINNATI, July 5.—The leading theme among local druggists of late has been an attempt to have a new pharmacy law framed for this State. A number of the leading pharmacists, together with the various members of the college of pharmacy faculty, have held several conferences in regard to the matter, but as yet nothing definite has been done. There is no end of righteous indignation existing among the members of the craft on account of the action of the Hamilton County delegation in the Legislature for the action they took in the attempt to pass the iniquitous Abbott bill, about which so much has recently been written. The claim is made that that august body in session at Columbus traded votes in a wholesale manner. Invidious people also claim that Senator Abbott, the former statesman, was not actuated by a desire to benefit the drug business by the introduction of his pet measure, making the existing pharmacy law more lenient. It is said that he has an intimate friend who is one of his constituents, and who failed to pass an examination as a pharmacist before the Board of Pharmacy. Fully ninety per cent. of the druggists of the city and suburbs are opposed to the passage of the measure, while a mere handful express themselves as favorable to the bill, giving as a reason that the members of the State Board of Pharmacy have shown favoritism in the examination of applicants for registration. The Abbott bill is now pending in the Legislature, and will likely not be brought up until the next session of the General Assembly. Apropos of the trouble and annoyance caused the local druggists to prevent interlopers from other States who are not qualified to run drug stores coming here, the above action was started. The idea is not to amend the present law, but to have an entirely new one passed, which will give the retail druggists the protection they merit.

Ed. Gray of Fifth and Main streets is able to be around again after a severe siege of typhoid fever.

Briggs Jones of Greenville, O., is clerking at the Kylius Pharmacy, corner of Liberty and Denman streets.

The Peck Drug Company which was recently organized in Toledo, O., has been reorganized under the name of the Toledo Drug Co.

W. Wagstaff's drug store in the Richard's block, Ashtabula, O., is about ready for business. It is elegantly fitted throughout, and a fine stock has been put in.

Dr. Louis Sauer of Central avenue and Baymiller street received a pair of boots a few days ago which had been sent to almost every town and village along the route of the American Express Company.

Al. Beehmer of 8th and Central avenue, whose marital troubles have been published in the daily papers from time to time, has been granted a divorce from his wife. The decree was granted only a few days ago.

Gus. Weisbrodt, the Middletown druggist, who was sentenced to the

penitentiary one day last week for embezzling \$30,000 from that city while acting as treasurer, will have charge of the drug room at the Columbus prison.

One day last week Louis Kusnick swallowed a bristle from a tooth brush which caused him much annoyance and no little pain. It required the services of two skillful physicians to extract the troublesome bristle from the victim's throat.

George W. Kylius, who conducts the pharmacy at Liberty and Denman streets, and is one of the studious men of the local drug trade, has purchased an extensive library. He now spends his evenings at home in the midst of his interesting family.

Will S. Wagner, who has been the chief prescription clerk at Weatherhead's pharmacy for a number of years past, has bought the Dehner Pharmacy, corner of 7th and Vine streets. The store will be restocked and refitted with elegant new fixtures.

Ed. P. Dehner, who recently failed in the drug business at 7th and Vine streets, has resumed his old position at the Weatherhead Pharmacy, corner of Sixth and Vine streets. He has a host of friends who hope to see him again the owner of a store.

Assistant Food and Dairy Commissioner J. J. Luebing is making matters extremely interesting for the local druggist and grocers. He claims that the latter are selling a brand of extract of vanilla that is nothing more or less than burnt sugar or caramel.

"Uncle" John Keeshan, the veteran druggist, who is nearing his eightieth birthday, is getting to be a great horse fancier. Almost every afternoon during the present nice weather he can be seen driving out the avenue behind a team of spirited equines.

There is to be an elegant new pharmacy at the head of the Sycamore cable street railroad. The store is to be located in a magnificent new flat building to be built by a well-known capitalist, and is to cost \$50,000. W. H. Adderly is to open the new store.

John F. Haines, the well-known druggist, who has been identified with a number of the prominent downtown stores, is now one of the traveling salesmen with Lehn and Fink of New York. He was here last week mingling with his many friends.

Ed. Bachus, a well-known Cincinnati drug clerk, who has been identified with a number of the leading pharmacies, is soon to open an up-to-date drug store at Freeman avenue and Everett street, just opposite the Armory. Bangs will furnish the fixtures.

Wilmot J. Hall, the owner of two drug stores in this city, and joint proprietor of Forbes' Diastate has, returned from an extended trip through the South, where he went for the benefit of his health. Mr. Hall's accounts of the growing South were very interesting.

George Budde, the hustling salesman in charge of the sundry department at the Stein, Vogeler Drug Company, made a flying trip to Dayton one day last week. He reports business in the Gem City as on the boom. He will

make weekly trips to that city in the future.

Andrew W. Bain, ex-president of the Cincinnati College of Pharmacy, and one of Cincinnati's leading pharmacists, is again behind the prescription counter at Weatherhead's store. Mr. Bain has two inventions with which he soon expects to startle the pharmaceutical world.

Fred. Kisker, who owned a pretty little drug store in Fairmount for a number of years, has closed out his business and is now clerking for John D. Otis and Company. Everybody in the West End knows him, and he will make a valuable man for his new employers.

Harry Dinsmore of Governor Mc Kinley's office in Columbus, who was for a number of years a drug clerk of this city, was around shaking hands with his local friends one day last week. While here Harry received an offer to travel in Ohio for a leading druggists' sundries house.

There seems to be a quiet race on between two well-known druggists for the nomination for coroner at the coming Spring Republican convention. Dame Rumor has it that Drs. John C. Otis and Charles F. Wocher both covet the nomination. They are both very popular gentlemen, and will doubtless make a manly fight for the plum.

Domestic Remedies in Wisconsin Defined.

The Wisconsin Board of Pharmacy have adopted the following definition of "Domestic Remedies," which it may be noted has been sustained by the Supreme Court of Illinois:

The State Board of Pharmacy has defined the "Usual Domestic Remedies" that may be sold by grocers and general stores under the provision in section twelve, pharmacy law, as—

Copperas	To be sold as stock remedies only.
Sulphur	
Saltpetre	
Rosin	
Glauber salts	For washing and soap-making purposes only.
Oil of Turpentine	
Sal soda	
Aqua ammonia	
Soda ash	For domestic use only (not medicinal).
Borax	
Ammonia, carbonate of	
Soda, bicarbonate of	
Cream of Tartar	For lubricating purposes.
Castor oil	

The sale of ordinary drugs and medicines by other than a registered pharmacist is provided for in section twelve, pharmacy law. Such articles as quinine, epsom salts, castor oil, paregoric, spirit of nitre, sulphur, saltpetre, and all other ordinary articles of drugs or medicines (not poisons) used for medicinal purposes, may be sold by general stores if put up in sealed packages, and properly labeled by a registered pharmacist of Wisconsin (the label should have the name of registered pharmacist thereon, and the words "Registered Pharmacist of Wisconsin, certificate No. —," with proper directions for use thereon). The sale of these articles put up by wholesale druggists or manufacturers not registered pharmacists in Wisconsin, is not legal under the pharmacy law.

MISSOURI.

St. Louis, July 6.—The annual meeting of the Missouri Pharmaceutical Association, held at Excelsior Springs, June 12 to 15 inclusive, is still talked of among the St. Louis druggists as one of the grandest events of the year. Some of the stay at home St. Louis druggists are now snarling that they would have gone to Excelsior Springs had they known the meeting was going to be such a success. A delegation of about thirty members went from St. Louis, among them were three professors of the St. Louis College of Pharmacy, namely, Messrs. J. M. Good, Francis Hemm and Dr. H. M. Whelpley. The only St. Louis wholesale drug houses represented at the meeting by members of the firm were the Hopkins-Weller Drug Company and the J. S. Merrill Drug Co., the former by George K. Hopkins and his son Geo. E. Hopkins, the latter by George R. Merrill. Traveling salesmen were present from all wholesale houses in the state. Much dissatisfaction was expressed on account of the non-attendance of Mayor Walbridge of St. Louis, who is also President of the J. S. Merrill Drug Company. St. Louis delegates received a lion's share of the honors. Dr. Whelpley was re-elected secretary, Ambrose Mueller assistant secretary, Prof. Francis Hemm was appointed chairman of the committee on drug adulteration, G. H. Chas. Klie, chairman of the committee on papers and queries, Dr. C. O. Curtman, chairman of the committee on pharmacopoeia, Geo. A. oHopkins, vice-chairman of the committee on entertainment, Otto Claus, chairman of the committee on transportation, Hon. C. P. Walbridge, chairman of the committee on trade interest, H. F. A. Spilker, chairman of the committee on legislation. Other St. Louis members were given prominent positions on the various committees and delegations. St. Louis members also came in for a good share of the prizes. This included those offered for entertainment features as well as papers, spelling contests, etc. One of the most interesting papers read at the meeting was a report by Dr. Curtman of St. Louis, chairman of research committee "B," of the U. S. pharmacopoeia revision committee. The doctor went on to show in this paper how every formula and test, as well as the reagents, for the pharmacopoeia of 1890 are now being thoroughly tested by this committee, so that the next pharmacopoeia will undoubtedly be very nearly perfect. [See page 10.]

The St. Louis College of Pharmacy is talking of extending their course to three years.

The leading medical colleges of this city have mapped out a four years' course for the near future.

C. F. G. Meyer, president of the Meyer Bros. Drug Co., sails for Europe the fore part of July.

J. M. Borton, one of the St. Louis druggists, is studying law. He looks more like a judge than a druggist.

C. C. May of this city has recently opened one of the finest drug stores in the city at 3000 Washington avenue.

E. J. Schall, manager of the patent medicine department of the Meyer Bros. Drug Co., has been quite ill, but is now able to be at his desk again.

Dr. H. W. Kohler recently sold his drug store at 1807 South 7th street, and on the 5th of July he and his wife sailed for Europe, where they will spend the summer.

All the wholesale drug houses of St. Louis close at one o'clock on Saturday, and it is noticeable that the employees do not care to linger around long after the hour for closing.

At present writing the railroad strike and boycott is seriously affecting the wholesale drug trade of this city. The railroads are refusing to receive freight from these houses.

D. W. Rockwell, druggist at 7th and O'Fallon streets, made an assignment the fore part of the month. The Meyer Bros. Drug Co. bought the stock and sold it to parties living in the southern part of this state.

Dr. J. C. Falk, secretary of the St. Louis College of Pharmacy, now wears a sleepy look but a happy smile since the appearance in his household, on June 13, of a very young druggist by the name of Oswald Pleus Falk.

Otto P. Meyer, manager of the Meyer Bros. Chemical Laboratory, was married on the 6th of June to the belle of Grand Rapids, Mich. The happy couple attended the meeting of the Missouri State Pharmaceutical Association.

The medical colleges of St. Louis, with which we are blessed with eleven—if such a thing is a blessing—have all gotten out their catalogues for this year. Some of the colleges make special bids for Missouri pharmacy students.

Dr. L. H. Behrens is an ex-drug clerk who graduated at the Missouri Medical College last spring, and is now one of the internes at the City Hospital. He is getting along nicely there, and prospering about as most druggists who study medicine do.

A canvass of the wholesale houses of the city shows that business is slowly but surely improving. This is usually the dull season of the year, but they claim there has been a steady increase of business for the last sixty days and no signs of a change for the worse.

Theo. W. Meyers, who until recently was traveling salesman for the Cleveland Linseed Oil Co. of Cleveland, O., was recently arrested on our streets, charged with defrauding the Meyer Bros. Drug Co. and the Moffitt-West Drug Co. of this city, by getting them to honor bogus drafts. The case is now pending in the courts.

Dr. Frank L. James, editor of *The National Druggist*, departs in a few days for an extended visit through the South. He will spend a good share of his time down on the Gulf, fishing and bathing. Full particulars as to the number and size of the fish caught will no doubt be given by the doctor through the editorial columns of his journal.

A young St. Louis physician recently called upon his druggist to know if he could procure for him a new and wonderful rheumatic remedy which he had just discovered, and which he knew by the name of Kerosene. The druggist, who is noted for his keen eye for business, told the physician he could furnish it to him but it was rather expensive. The result was the physician left the store with four ounces of this new anti-rheumatic, for which he had paid fifty cents, and went to his office much pleased with his success in being able to procure the new remedy. He never once mistrusted that it was the ordinary coal oil of the market.

The St. Louis Drug Clerks' Society, which for some time past has existed only in name, has recently been imbued with new life, and is now what the boys call a howling success. At their last meeting held June 21, twenty new names were proposed for membership. They now hold regular meetings every month, and at their last meeting a committee, with Charles F. Geiger as chairman, was appointed to be known as the program committee. The name of the chairman of this committee is sufficient to insure the best programmes in the future. Four committees of two members each were also appointed to thoroughly canvass the city in the interest of the society. Besides the moral requirements, a drug clerk must be registered in the State of Missouri before he is eligible to membership. The object of the society is to bring the drug clerks of the city together for professional improvement and social enjoyment, and with S. E. Barber at the helm, Otto F. Mack, secretary and Frank Garthoffner in charge of the finances, the St. Louis Drug Clerks' Society promises to be one of the best organizations of its kind in the country.

The Illinois Board of Pharmacy examined a class of 98 at their meeting in Chicago, June 12-15, 1894. The following passed as registered pharmacists: H. A. Berkey, T. Cupit, Jr., W. H. Dayton, M. P. Ellis, J. B. J. Hoferlin, R. W. Hull, G. A. Jacob, H. J. Kamps, J. E. Klenze, W. Kramer, H. B. Museum, R. W. O'Brien, O. G. Rahlfs, G. H. Rahlfs, H. P. Sandkoetter, A. M. Smith, N. C. Unseth, L. G. Volkmar, H. H. Vollmer, A. G. Wegener of Chicago, F. C. Deutsch, Bloomington; H. M. Ferguson, Gardner; E. Flagg, Clarence and A. J. L. Schroeder, Quincy. The next regular meeting of the board for examination will be held at No. 173 39th street, Chicago, September 4, 1894. For further information address Frank Fleury, Secretary, Springfield, Ill.

Frank T. Green, of San Francisco, tells of a customer who called at his place of business and asked for Helmbold's Rose Wash, or Helmbold's Buchu, put up in the old style. It seems the customer wanted the medicine for the revenue stamp, as he said he had succeeded in buying some and had sold the proprietary stamp for \$16. Some time after the war, the Government issued a large number of revenue stamps for proprietary medicines, toilet articles, etc. Some fifty or sixty of the former had special stamps made, and those are very valuable. They have a regular catalogue price. Anything over four cents is worth considerable money.

Read the "trade notes" and the market review every week if you want to keep posted.

The American Pharmaceutical Association Meeting.



A. P. A. MEETING AT ASHEVILLE.—BATTERY PARK HOTEL.

The Forty-second Annual Meeting will be held at the Battery Park Hotel, Asheville, N. C., the first session opening on Monday, September 3, 1894, at 10 o'clock A.M.

Two years ago the A. P. A. met along the rugged mountains of New Hampshire; this year you are called to meet among the verdure clad and far more beautiful mountains of the Blue Ridge in the "Land of the Sky." It is earnestly hoped that as many as can possibly do so will arrive on Saturday and Sunday, September 1 and 2, as those delaying their arrival until Monday will lose the greater part of the day.

The train from Salisbury, Washington and the North is due in Asheville at 4 P.M., that from Atlanta and the South at 11 P.M. Passengers from the West can also come by way of Atlanta arriving at 11 P.M. A committee will meet all visitors at the trains and assist them in procuring such accommodations as they desire. The Battery Park Hotel (the official meeting place of the Association) will accommodate all delegates, members and friends at the special rate of \$2.50 per day; the Swannanoa, \$2 to \$2.50 per day; the Oakland Heights, \$2.50 per day; there are numerous first class boarding houses with rates of from \$1 to \$2 per day.

The local committee have prepared the following:

PROGRAMME.

MONDAY, September 3.

10 A.M. Council Meeting.
3 P.M. First General Session.
8.30 P.M. Reception.

TUESDAY, September 4.

9 A.M. Second General Session.
3 P.M. Section of Commercial Interest.
8.30 P.M. Entertainment.

WEDNESDAY, September 5.

9 A.M. Section on Scientific Papers.
3 P.M. Carriage Drive.
8.30 P.M. Section on Scientific Papers.

THURSDAY, September 6.

9 A.M. Section on Education and Legislation.
3 P.M. Section on Scientific Papers.
8.30 P.M. Section on Commercial Interest.

FRIDAY, September 7.

9 A.M. Section on Education and Legislation.

1 P.M. Excursion to Hot Springs.

SATURDAY, September 8.

9 A.M. Final Session of Association.

The carriage drive on Wednesday will include a visit to the magnificent country seat of George Vanderbilt, whence a magnificent panorama is laid before the visitor, which is described by the committee as follows:

Here your eyes are opened in wonder at the vast work that is in progress. The road winds along the banks of the Swannanoa, through the nurseries and well-kept fields, and shortly comes out upon the macadamized approach road, about three miles long, leading up to the mansion. All that art and nature combined could furnish has been used to make this road beautiful. A rippling stream bridged innumerable times by handsome stone arches sparkles forth here and there.

It would be useless to attempt to give one an adequate idea of the stupendous work in which Mr. Vanderbilt is engaged, and suffice to say that the mansion is hardly completed, and the work on the grounds (8,000 acres in extent) is in an even more unfinished state, and that with \$4,000,000 already expended, it is estimated that six millions will be necessary to complete the work. Leaving the Vanderbilt estate the drive continues up the Swannanoa, by the picturesque Kenilworth Inn, over Beaucatcher Mountain and back to the hotel. From Beaucatcher Mountain a view fully as beautiful as from Vanderbilt's is to be had, though here the city is spread out at our feet, the mountains in the background.

Rhododendron, lilies, and fragrant shrubs and grasses lend perfume to the air, and one can almost imagine himself inside some immense green house. As the carriages advance, broad vistas of green open on every side, with here and there a glimpse of the distant mountains. Finally the end is reached, and at the top of a commanding eminence we alight and gaze in rapture at the beautiful panorama spread out before us. The French bread is at our feet; Asheville—beautiful in the distance—is behind us; away to the west are the balsam, blue and indistinct in the soft autumn haze. Nearer still is Pisgah and the far-famed "Rat," 5,700 feet high, and looking for all the world like some volcano, extinct and solemn in a peaceful landscape. Away to the north are the Smoky Mountains and Tennessee. A little to the right the Graggies and the Blacks, Mount Mitchell, historical as the resting place of Prof. Elisha Mitchell, and the highest land east of the Rockies, towering grand and majestic 6,770 feet above the sea. To the east the Blue Ridge stretches in a wide circle, a background of this beautiful panorama. From where one stands, a stretch of the country 40 miles across is before the eye—mountain and valley, river and plain, civilization and nature in her wildest and grandest forms, side by side.

The Battery Park Hotel, which is illustrated herewith, is one of the most elegantly operated and favorable located hostleries in any of the mountain resorts of the United States.

Henry R. Cheers of Plymouth, N. C., ex-president of the North Carolina Pharmaceutical Association, is an active and enthusiastic member of the committee on entertainment, and has enlisted the aid of Polk Miller, president of the Polk Miller Drug Co. of Richmond, Va., who will favor the pharmacists with some of his inimitable recitations depicting the old time ante-bellum dargy.

The committee on transportation will announce the details of the plans later. The usual one and a third fare will no doubt be conceded. This committee is composed as follows:

COMMITTEE OF TRANSPORTATION.

Caswell A. Mayo, 37 College Place, New York, chairman; S. A. D. Sheppard, Boston, Mass.; W. J. M. Gordon, Cincinnati, O.; A. K. Finlay, New Orleans, La.; Henry Sharp, Atlanta, Ga.; A. E. Ebert, Chicago, Ill.; Chas. M. Ford, Denver, Col.; M. W. Alexander, St. Louis, Mo.; Wm. Searby, San Francisco, Cal.

RANDOM NOTES.

Doctor Harry Winston Harper of Fort Worth City, has been elected professor of chemistry at the Texas University. Dr. Harper was born at Boonville, Mo., 35 years ago.

Frank Shaw has purchased Brokaw's Union Depot Pharmacy at St. Joseph, Mo.

L. N. Fenne has sold his drug store in Waukegan, Ill., to George Roberts, of Chicago.

O. Wohlen & Son have opened their new drug store in Centerville, S. D., for business. It is under the charge of Dr. T. J. Sheehan as pharmacist.

The Enterprise drug store, Lakeview, Mich., has been established twelve years. O. W. Vining is proprietor, and has long been a resident of the town.

Stream & McCammon, of Des Moines, Ia., are getting on nicely with their improvements, and when completed the "True Druggists" will have about the nicest store in Iowa.

Jacob Rossback, who is widely and favorably known to the drug trade, and who for fourteen years has been with Drake Bros., Milwaukee, Wis., anticipates opening a drug store of his own in that city shortly.

E. B. Heimstreet, of Janesville, Wis., has offered his drug store for sale, and is said to contemplate establishing a large sanitarium in one of the towns in the southern part of Wisconsin, with Dr. Robert A. Kitto of Racine at the head.

Waite & Wicker, druggists, of Coldwater, Mich., have improved the interior of their store in a manner that adds greatly to its appearance and convenience. Plenty of space has been given to the lovers of good soda, and the arrangements of cases, counters and display goods are made in the best of taste.

FOREIGN NEWS NOTES.

Large and rich deposits of nitrates are said to have been discovered in upper Egypt.

The use of the metric system of weights and measures has been made obligatory for physicians and pharmacists in Russia.

The combined German manufacturers of salicylic preparations have reduced their prices, both for domestic and export consumption.

A German national food and health exhibition will be held at Kiel from August 4 to 19, which will include exhibits of disinfectants, chemicals, perfumery, surgical appliances, etc.

The fifth annual meeting of the Bavarian apothecaries was held at Munich from the 16th to the 19th of May. The principal interest of the meeting centered in the discussion of the question of "personal concession" as applied to pharmacy.

It is stated that Germany now produces 90 per cent. of the world's output of alizarine and 75 per cent. of that of aniline-dye. The United Kingdom, Switzerland, and France share almost the whole of the remaining 10 and 25 per cent. between them.

President Diaz of Mexico has granted a concession to Scott & Bowne to build a glass factory at Tacubaya, a suburb of the City of Mexico. This step has been taken so as to avoid the payment of the excessive duty which is exacted on drugs in bottles.

Of the 68,000 roubles annual income necessary to conduct the proposed medical college for women in St. Petersburg, 48,000 have already been secured. The State is to furnish buildings and to open the State hospitals to the students for clinical purposes.

The suit of the German chemical firm of Dr. F. v. Heyden Nachf., at Radebeul, near Dresden, for the annulment of the saccharine patent of Fahlberg List & Co., in Salbke-Westerhausen, was dismissed with costs on June 9 by the Reichsgericht at Leipzig, the highest German court of law.

A monument will shortly be placed over the grave of the late Professor A. W. von Hofmann, in the Dorotheen cemetery in Berlin. The monument will bear a marble bust of the deceased scientist, sculptured by Schaper, from a model made on the occasion of von Hofmann's seventieth birthday.

Professor Wulling, of the University of Minnesota, has reached the historic city of Edinburgh in his travels, and we gather from a recent issue of the *British and Colonial Druggist* that he is making himself familiar with the workings of the British pharmaceutical institutions. He was present at the last meeting of the North British Branch of the Pharmaceutical Society of Great Britain, and took part in the proceedings.

The village of Schmargendorf, in Prussia, is not rich or populous enough to support a pharmacy, but it is situated miles from anywhere, and the inhabitants are very anxious to have access in their midst to pharmaceutical aid. To supply this want the authorities have ordered the apotheker at Deutsch-Wilmersdorf to keep a branch shop at Schmargendorf. At first the apotheker, expecting nothing but loss from the venture, refused, but being told that, if he persisted in that attitude, his licenses for branch shops in other more prosperous villages of the district would be cancelled, he reluctantly consented.

We are much grieved to learn of the serious illness from cardiac inflammation of the accomplished associate editor of the *London Chemist and Druggist*. Peter MacEwan, Ph.G., F. C. S., is known in this country to others besides the readers of his interesting and versatile weekly. He paid a visit to the United States in the early Fall of 1892, and made many friends among men prominent in teaching institutions and business. He is a fine type of the lowland Scotchman, being short in stature, with clear blue eyes and sandy complexion. In speech and manner he is slow and cautious, and greatly prone to his countrymen's trick of "takin' a man aff." But as his friend Barrie would phrase it, he is just as "quick in the up-tak," so he counts his friends without number throughout the entire length and breadth of the "kingdom."

Trade Notes.

Write to Gilpin, Langdon & Co., Baltimore, for enough opium to make 100 Cc. of denarcotized tincture of opium free.

There is no live druggist who will not take advantage of the "One year's time offer of the Eureka Chemical Co. of Detroit for their genuine pennyroyal wafers." You lose that many sales in a year by not having them in stock aside from the sales natural to result from your own effort to accommodate those who ask for a "Monthly Regulator" that will give a result.

The Royal Malt Extract Co. have built up a large business in Philadelphia through the efforts of their energetic salesman, D. E. Bransome, and the excellent quality of their malt. One prominent druggist on Chestnut street sold over 315 gross within the past year. Mr. Bransome informed one correspondent that notwithstanding the dull times his daily orders for malt extract is increasing.

Portsmouth Lavender Salts.

The accompanying illustration shows the new container in which the popular



lar Portsmouth Lavender Salts are now offered to the public. It is just the thing for travelers, as the screw cap which fits over the stopper prevents the contents from being spilled. The new style was exhibited at the recent meeting of the Massachusetts Pharmaceutical Association at Worcester, and if complimentary remarks count for anything the people of Massachusetts are going to hear of the "Portsmouth." Price in the trade, \$2 per dozen.

Medals at the Venice Exposition.

Messrs. Burroughs, Wellcome & Co. have been awarded a grand diploma of honor and a gold medal for their goods at the International Exhibition of Inventions, which is now being held in Venice. They have decided to present their entire exhibit, at the closing of the Exhibition, to the hospitals of the city. Foods and hospital and military supplies are very prominent at the Exhibition, which is located in the building erected for the first International Exhibition that was held in Vienna. It is called the "Rotonda," and has in the center the largest dome ever constructed. All the space has been taken, and the whole Exhibition is crowded with handsome exhibits from every corner of the earth.

A New Sterilizer.

Joseph G. Taite's Sons' Sterilizer consists of a boiler, a frame for eight bottles, a hot water can, nine 8-ounce



graduated nursing bottles with rubber corks and glass stoppers, a brush or bottle cleaner, and six bottle drainers, packed in a neat wooden box.

We would call attention to the shape of the bottles, which are oval and not round. They have adopted this shape because of the universal approval of an oval bottle for nursing.

They are made of the best annealed white glass and have gracefully curved necks, making them easy to clean and drain, and are graduated in ounces and half ounces.

The bottle drainers are very simple in construction, and can be hung either inside or outside the boiler. Write for prices to Joseph G. Taite's Sons, Office and Factory, Twelfth, Fitzwater, and Beckwith streets, Philadelphia, Pa. Mentioning this Journal.

Glycerin at the Midwinter Fair.

The W. J. M. Gordon Chemical Co., of Cincinnati, have received notice from the Midwinter Exposition as follows:

SAN FRANCISCO, JULY 3, 1894.

TO THE W. J. M. GORDON CHEMICAL CO.
Midwinter Exposition awarded you the first premium for Glycerin conveying gold "medal."

This is a continuation of their success in obtaining the highest awards for their glycerin in every exposition that they have exhibited, and merely confirms the prevalent high estimate of the quality of Gordon's glycerin.

Drugs Set to Rhyme.

With the object of furnishing some aid to memorizing the statements and formulas of the British Pharmacopoeia, one of our clever English contemporaries, *The Chemist and Druggist* has instituted and offered prizes to the successful contestants in a rhyming competition.

We give below a few of the verses submitted in competition:

ADEPS LAMBÆ.

Mary had a little lamb
With wool upon its back,
To which adhered an unctuous balm—
Impure cholesterolin fat.
When purified its names are many:
The B. P. has it adeps lambæ.

Antipyrin and the synthetic remedies yield several clever verses. It was a bold experiment to set them to music.

ANTIPYRIN.

Phenyl-dimethyl-pyrazolone,
From phenyl-hydrazin obtained, phenazone,
Colorless crystals, inodorous, scaly,
Which chloroform, spirit, or water solves freely.
The doses official are three grains to twenty,
But chemists experienced say ten grains are plenty.

PHENAZONE.

By nitrous acid salts of aniline
Are changed to salts of diazo-benzene;
Sulphurous acid, thirdly, changes this
To phenyl-hydrazine, whate'er that is;
And thence, by paths, to heaven only known,
Comes phenyl-dimethyl-pyrazolone.

CALCI CHLORIDUM.

Calci chlor. may be formed, as anyone can tell,
By neutralizing calci carb. with a little HCl.
Then add a little solution of chlorinated lime
And calci hydras, too, a little from time to time,
Filter and evaporate until a solid's made,
Dry at 400 Fahrenheit (204 Centigrade).

CAMPHOR.

Stearoptene from the *Cinnamomum* wood,
From China and Japan imported crude.
The product of the first rough distillation
Is purified at home by sublimation.
On water floats, though in it melts but slightly.
And with a flame that's smoky burns brightly.

EXT. BALS LIQUIDUM.

[The only official preparation of balm fructus.]
"Bael fruit! bael fruit! have you a home?"
"Yes, in extract balm liquidum."

THE GREEN EXTRACT, B. P.

When bruised the verdant juice exudes. Just heat
it by "degrees"
You'll find that one-and-thirty frees the chloro-
phyll with ease.
The heat, increased by thirty more, plus thirty
more and ten,
Coagulates and separates the useless albumen.
Then concentrate the filtrate, add the chlorophyll
so green,
And stir at one-and-forty till a true extract is seen.

INF. GENT. CO.

Orange-peel and gentian-root,
With fresh-cut lemon-peel to boot,
Boiling water o'er them pour,
Let them stand for half an hour;
If this little rhyme you know
You can make inf. gentian. co.

LIQUOR CALCIS SACCHARATUS.

Liquor calcis saccharatus:
Take of lime well slaked one ounce,
Then of sugar well-refined
Take the double for the nonce;
Triturate, then slowly add
Aqua destill. twenty ounce.

THE MAGNESIAS.

If mag. carb. lev. you wish to make,
Cold dilute solutions take;
But mag. carb. pond. is not thus got—
Use strong solutions boiling hot,
By heat now loose carbonic's bond
To get magnesias lev. et pond.

The muse takes kindly to the misturæ,
especially to the mist. spirit. vini gallici.

MIST. FERRI CO.

Mist. ferri co., I'd have you know, requires some
care in making.
Take sacchar. alb., pot. carb., and myrrh; please
grasp the situation.
And in a mortar subject them to careful trituration.
Next aqua rose gradually add secundum artem.
(The ferri sulph in some of which dissolve before you
start 'em.)
Then add the nutmeg spirit, and mix the whole
with vigorous shaking.

MIST. FERRI CO.

Potass. carb. and sacchar. album,
Myrrh and aqua rose
Ferri sulph last shall come:
Nutmeg makes it "nosey."

MISTURA OLEI RICINI.

Mix ol. limon. and caryoph. with six of castor ol.,
To these add twenty minims of B. P. potassa sol.
Pour in the syrup, and another third of liquor pot.
Half the aqua flor. aurant., then the remaining lot
Of alkali solution; and the last thing you must do
Is to add the orange-water till the product's ounces
two.

MIST. SPT. VIN. GALL.

Rub up two yolks with half an ounce
Of powdered sugar fine,
Then add, sed grad. four ounces each
Of the water and the wine.
The product, every chemist knows,
Is Peter Squire's "delicious dose."

MORPHINE.

From bitter tears that Asian poppies weep
(The death-pale angels of the powers of Sleep),
Won by an art than poet's nobler far,
Behold how fine these silvery needles are!
In each a spell Lethæan slumbering lies—
Ease for pained limbs, rest for grief-wearied eyes

OPIMUM.

'Tis the juice of the poppy inspissated
When fresh it is plastic, 'tis bitter when tasted;
Imported in "lumps" which may once have been
round,
And weighing some under, some over a pound.
These lumps are covered with little brown specks:
The fruit, says B. P., of a kind of Rumex.

PEPSIN, B. P.

When you see a healthy sow, chase her till you've
caught her.

Open with a knife, and lay the carcass on a board;
Remove from stomach food and dirt, and cleanse
with little water.

Scrape away the viscid pulp with any old blunt
sword.

Dry the pulp on pane of glass, or earthenware that's
white,
Keeping temperature below 200 Fahrenheit.

PHOSPHORUS.

Phosph'rus melts at one-one-naught degrees of
Fahrenheit,
A little o'er its melting-point then in air it doth
ignite.

Burning with a luminous flame;
Specific gravity, one point seven;
Is dissolved in water, loth
in boiling turps and ether both.

PHYSOSTIGMINE.

Dissolve ext. physostig. in water, filter (just to keep
it free.

From physosterin), then add enough NaHCO₃;
Shake the mixture up with ether, separate ethereal
layer,

Evaporate, and you will find the product
physostigmine there.

PIL. RHBI CO.

Oh, when you have to make a mass of compound
rhubarb pill,

You take a Wedgwood mortar, and manipulate
with skill.

Of rhubarb-root in powder, as directed by B. P.,
You weigh out just three ounces, and should do it
carefully;

Two ounces and a half to this you add of aloes Soc.,
Myrrh in powder ounce and half take from your
freshest stock,

The same of soap (though hard you use, should not
be hard as flint),

Then ninety measured minims of the oil of pep-
permint,

Diffuse oil through the powders, and then, but not
before,

Beat into mass with treacle, using ounces weighing
four

P. S.—If when rolling pills, you wish them to keep
a perfect sphere,
I might suggest you did not use all the treacle
mentioned here.

POTASS FERROCYNANIDE.

In making potass ferrocyanide
You parings take of horn and hoof and hide;
Fuse them with potass. carb. in pot of iron
Until the mass is done "unto a turn."
Leave it to cool; next in hot water solve,
And heat till yellow crystals you evolve.

Shot in the Bull's Eye.

Red Messina Orange—right in the mid-
dle of it—soda fountains are doubling
their business on it.

Hance Brothers & White say: "Order
a dozen or two and use a bottle—serve it
right—and return the rest if it doesn't hit
the bull's eye."

Orange isn't expected to be very won-
derful. People that like it like it, and
people that don't are apt to let it alone.
If you sell Hance Brothers & White's Red
Messina Orange you will find it new and
out of the beaten track. It is fresh and
sweet, the color is good, the strength is

high, and the flavor is orange—nothing
but Red Messina Orange—which is rare.

Cherry Ripe is another trade maker.

It was new last year; it is new this year
to nine out of ten. The people have
no means of finding it out, and every man,
woman, boy and girl will thank you for
introducing it.

If Hance Brothers & White had any
fear of their coming back they shouldn't
risk them. There's a run on them; hands
full. But they want them sold wherever
soda is served, in a way to do fine flavors
justice.

They have a lot more—Pineapple, Straw-
berry, Raspberry, Chocolate, Unfermented
Grape, Lemon, Red Currant, etc. To
name them is to praise them. They
haven't a mean one in the lot. They
would rather say: "We don't make it,"
than make a mean one.

Remember, "Good soda, good drugs;"
but say nothing about it. People will
find it out fast enough. That applies to
Hance Brothers & White as well as to
you. These fine fruit juices they make
for your soda fountain are to advertise
their pharmaceutical and chemical prepa-
rations.

Drop Hance Brothers & White a postal
and get their liberal supply of effective
advertising by return mail free. And if
you haven't their "Help at Your Soda
Fountains," they will send it for the
asking.

Summer Vacation Tours.

The Baltimore and Ohio R. R. Co. now
has on sale at all its offices east of the
Ohio River a full line of tourist excursion
tickets to all the lake, mountain and sea-
shore resorts in the Eastern and Northern
States and in Canada. These tickets are
valid for return journey until October
31. Before deciding upon your summer
outing it would be well to consult the
B. & O. Book of "Routes and Rates for
Summer Tours." All B. & O. ticket
agents at principal points have them, and
they will be sent post paid upon receipt
of ten cents, by Chas. O. Scull, General
Passenger Agent, B. & O. R. R., Balti-
more, Md.

The Bi-palatinoid in Rome.

Messrs. Oppenheimer, Son, & Co.
(Limited) have received a telegraphic
message from Rome stating that they
have been awarded a gold medal for their
exhibit of palatinoids, bi palatinoids, and
digestive ferments at the XIth Inter-
national Congress of Medicine recently
held in Rome. Everybody who visited
the exhibition appears to have been par-
ticularly struck with Messrs. Oppen-
heimer's fine display there. The two
handsomely decorated tables upon which
the firm's goods were shown (not in com-
mercial packages, but neatly arranged on
dishes, etc.) were never without some
prominent member of the Congress or the
official world anxious to gather informa-
tion on the composition and action of the
pharmaceutical preparations displayed.
The continental journals which gave
notices of the exhibition all caught on to
the bi-palatinoids, and even the German
chemical press, which is not usually quick
in acknowledging the merits of a British
preparation, could not withhold its
modicum of praise. Dr. Hans Heger of
Vienna, the well-known authority on
pharmacy and food adulteration, sponta-
neously selected the mode of medication
represented by the bi-palatinoids as the
subject of a paper read by him in the

Pharmacological Section of the Congress, in which he referred to the system of administering medicines in this form as certain of a great future, and marking an important advance in pharmacy. The exhibition jury consisted of the following university professors: Paterno, Rome (President); Daccomo, Modena; Peratona, Catania; Hans Binz, Bonn, and Professor Monardi, the president of the Government Chemical Laboratory in Rome.—*Chemist and Druggist*.

Matzoon.

Dr. M. G. Dadirrian of New York city, who holds exclusive rights to the use of the word "Matzoon" as a distinctive title for the well-known preparation of fermented milk food bearing his name, has instituted proceedings in the Supreme Court of New York against certain parties who are infringing upon his trade mark. In the first of these suits, the Court has rendered a decision in his favor, and granted an injunction against Z. K. Theodorian, one of the infringing parties.

Following is the text of the decision handed down by Judge Gaynor:

The plaintiff is a native of Turkish Asia Minor, and the defendant of Constantinople, but they have been residents of this country for a number of years. In Eastern countries there is a fermented milk product in common use. It is a staple article of food, as cheese and butter are here. It is coagulated milk. It is called in Turkish a name the sound of which, rendered in English character, is, as nearly as may be, "Yogourd," and in the Armenian dialect by a name the sound of which similarly rendered is, as nearly as may be, "Matzoun" or "Matzoon," or "Madzoon." Translated meaningfully into English, the article would hardly be called cheese; it would more nearly be curd; or, in its less consistent state, it resembles American bonnyclabber. There is some dispute as to whether it is made in this latter state, but it is not material. The English letters which make the sound "Matzoon" do not render the name of the article into English, or convey any understanding of what it is. It is needless to say that it is not the Armenian word at all, for the Armenian characters do not resemble the English either in appearance or sound.

In 1885 the plaintiff began to prepare and place in the market in this country a milk product for which he claims medicinal properties. He has from the beginning labelled it "Matzoon," and sold it under that name in bottles. He adopted a distinctive label, bearing the name "Matzoon," in large letters, and under it a picture of Mount Ararat and the ark and dove, and has used it ever since continuously on his preparation or product, which has become widely known under such name and label, and has grown to extensive sale as an article of commerce. I have no doubt that Turks and Armenians settled in this country made and used the article in their families before 1885, and, it may be, sold it to a limited extent; but I do not doubt upon the affidavits that the plaintiff was the first to name it "Matzoon" and to put it up and sell it under that name. It is well settled in

trade mark law that any one who coins a new word and applies it to the article of manufacture has a property in it and is entitled to be protected in its exclusive use, provided it is not generic or descriptive of the article, or is not used to denote quality, ingredients, or the like, but is simply arbitrary or fanciful.—(*Brown on Trade Marks*, Sec. 219.)

The word "Matzoon" answers these requirements. It is not a real word, and it has no meaning. It is wholly fanciful. It is not a translation of any foreign word or name, as has been seen. It is nearly the sound of an Armenian word, but it is not that word, as has been seen, and it signifies nothing. If a baker were to name his bread "pang," it could not be said the word was not fanciful, but was in use, or descriptive, simply because it has the sound of the French word for bread.

There is some dispute whether the article being sold by the plaintiff is the real article as used in the Eastern countries, but that is not at all material. He has identified the word with his article, whatever it is, and the defendant has no right to use it on a similar article.

Let the injunction be made permanent against the use of the word, and also of the label as a whole.

On June 8 it was further ordered, that the above-named defendant Z. K. Theodorian, his agents and servants, be commanded to refrain from preparing, putting up, selling or offering, or advertising for sale any liquid preparation of fermented milk, or other similar article, under the name of "Matzoon," or any colorable imitation of said name, and from in any way imitating or infringing the plaintiff's trade mark and label for a medicinal beverage made from fermented milk, or form of bottle used in connection with said trade mark and label, during the pendency of this action and until further order of the Court.

A New Soap and Container.

The Lee's Liquid Soap Company of Chicago have rented offices in the American Druggist Building, 37 College Place, New York, and are actively introducing their liquid soap and patent reservoir. The soap has found remarkable favor in the New York hospitals, where it is used for its cleansing and detergent qualities by the surgeons. It is of about the same consistency of glycerin, and its manner of application by means of the patent reservoir is at once cleanly and economical. The reservoir, for which a patent was granted in April of this year, while ingenious in arrangement is remarkably simple in construction, and cannot possibly get out of order. In shape it resembles a small cylindrical percolator. It is provided with a stem depending from the outlet, and this on simple pressure from the palm of the hand releases a sufficient quantity of the liquid to provide an abundant lather. The New York branch of Lee's Liquid Soap Company is in charge of Chas. F. Parsons, 37 College Place, to whom all communications should be addressed.

The Soda Fountain.

Hear the fountain's merry fizz—

Soda fizz!

How it sputters, spits and gurgles when it's getting down to biz!

With a "zwee, zwee, zwee,"

Full of rhythmic melody,

And a sort of ghoulish glee,

As it thinks—

"Anything from A to Z,

Step up quick! what shall it be?

For it's all the same to me

What he drinks!"

Oh, the merry fountain's fizz—

Soda fizz!

What an effervescent robber of the pocket-book it is!

"Orange? Lemon?—fill the cup!

Hurry! hurry!—drink me up!

Drink me rightly,

While I brightly

Fizz and sizz!"

That's the merry, merry soda fountain's fizz.

Evening Sun.

Over Half a Century.

For over half a century the John P. Lovell Arms Company has been looked to as an authority on sporting goods, and no one who ever had business dealings with this well-known firm has ever had cause to complain of unfair treatment.

After 55 successful years this house is now known throughout the country, and the very mention of the name John P. Lovell Arms Company is a synonym of honesty and reliability.

John P. Lovell, the founder of the company, although 74 years old, still retains much of his old-time vigor and keenness. He is invariably at his desk every day to overlook the rapidly increasing business of the company.

No sharp practices in trade can be laid up against him, and it is Mr. Lovell's pride that he has never given one man with whom he has transacted business any cause for complaint. His record for honesty and integrity is irreproachable.

Mr. Lovell is furthermore one of the oldest members of the order of Masons and Odd Fellows, and has been identified with other organizations and institutions.

Fortunately Mr. Lovell has some sturdy and business-like sons whom he early associated with him.

Colonel Benjamin S. Lovell, who is endowed with rare business ability, fills the position of treasurer of the company in a most thorough manner. He not only works assiduously for the interests of the company, but he has long been connected with movements for public good and organizations whose character and principles are irreproachable.

Imbued with the patriotic spirit of his sires, he enlisted in Company A, Forty-second Regiment, Massachusetts Volunteers, at the age of 17. His services for his country are only equalled by his persistent efforts in behalf of his comrades in later years.

For 15 consecutive years he was chosen commander of Reynolds' Post 58 G. A. R. He was junior vice-commander in 1880, senior vice-commander in 1881, and declined the nomination for department commander in 1882.

He was aide-de-camp to General John C. Robinson, national commander-in-chief of the G. A. R. in 1877-1878. He also served in the staff of General Russell A. Alger in 1889, and was a member of General Palmer in 1892.

During the administrations of Governor Long in 1880, 1881 and 1882, Colonel Lovell was a prominent member of His Excellency's staff.

Furthermore, Colonel Lovell has been delegate to four Republican national conventions, a member of five State legislatures, and has been prominent in Masonic and Odd Fellows' circles.

Governor Greenhalge, too, recognizing the capacity of Colonel Lovell, attached him to his staff.

Thomas P. Lovell, director, and H. L. Lovell, clerk of the corporation, have also been instrumental in bringing this company to the front.

The business of the John P. Lovell Arms Company has steadily increased until now two large buildings are necessary. The one at No. 147 Washington street is well known to all. The other at 131 Broad street is a recent addition and became indispensable, owing to the phenomenal growth of the bicycle department.

The John P. Lovell Arms Company have every facility which money, a thorough knowledge of the business and the greatest skill mechanism can produce to make the "Lovell Diamond" the best bicycle in the world.

Every year since its first appearance this bicycle has been improved, until now it is unsurpassed in point of material, workmanship, finish, safety, speed, beauty and easy running qualities.

This statement would be of little value if not backed by the guarantee of the company, and it is this which has led one well-known bicycle agent in Boston to make the offer that if you can produce in this country or any other a better bicycle than the Lovell Diamond '94 model, he will give you \$1,000 in coin of any realm for each and every such wheel produced.

Not only is the use of the Lovell Diamond becoming more widespread in this country, but foreign dealers are not slow in recognizing the merit of this machine. Last week the company shipped a lot of their bicycles to one of the largest Paris houses, making a specialty of handling high-grade wheels in France. This is especially notable, as the representative of this house spent many weeks in this country selecting a bicycle for his house to carry. On his return he stated that the Lovell Diamond was superior to all English and French made wheels.

The John P. Lovell Arms Company has also closed a contract with an Englishman who desires to handle their wheels in London. He is confident that the light and durable American wheel will rapidly supplant the heavy wheels now in vogue there.

This week orders were received from India—a most extraordinary occurrence, for this field, has heretofore been occupied exclusively by English manufacturers.

The "Lovell Diamond" has the field, and it has already demonstrated that it

is the king of bicycles.—*Boston Herald.*

Voices From Afar.

The *Chemist and Druggist* says the following letter was recently received by a Liverpool wholesale house from a customer in a neighboring town:—"B—, 24th February, 1893.—Gentlemen Wherefore have you not sent me the sope. His it bekwase you think my money is not so good as noboddy elses. Dam you—Co wherefor have you not sent the sope. Please send sope at once and oblige your respectful servant Richard Jones.—PS Since writing the above my wife has found the sope under the counter."

N. F. Carlsbad Salt.

The amount of trash that finds its way into the columns of the daily newspaper, in praise of the alleged medicinal qualities etc., of something which is advertised as "Genuine imported Carlsbad Sprudel Salt" is often amazing. However as the articles are usually advertisements of the plainest type, they are taken at their true value, and probably help sales. Meanwhile druggists who go by the National Formulary, experience no difficulty in preparing "Carlsbad Salt" which gives satisfaction both to the medical profession and the laity.

Under the title "Melfine" the Melfine Co. of Syracuse, N. Y., are introducing a new antiseptic liquid intended for both internal and external use. It is stated to be a peculiar combination of "ozomferous essences, antiseptic oils and gums, with the essential antiseptic principles of numerous non-toxic antiseptic agents." Melfine is a pleasant preparation of evident antiseptic value. As a mouth wash, gargle, or application in throat or nose troubles it should prove useful.

Fluctuations in Important Drugs.

We find the following statistics of fluctuations in the prices of the more important drugs during the past year in a recent issue of a contemporary trade journal. Referring to opium it is noted that this is perhaps the most disappointing article on the list. On July 1, 1893, the quotation for single cases was \$2.55, with the market reported unsettled and demoralized. Values continued to decline until the latter part of August, when \$2.25 was acceptable to sellers. Early in September a reaction set in, and it was rumored that a large speculative operator had entered the field with enormous financial backing, and that success was assured. Whether the statement was true or imaginary has not transpired, but values moved upward until \$2.75 was recorded, when the tide again turned, and by the first of December the quotation was \$2.05. A gradual recovery followed, and in January a sharp advance occurred, owing to a proposal by the Ways and Means Committee to place the article on the dutiable list at \$1 per pound. Many holders advanced their views to \$3.25, and general firmness prevailed with large purchases made in primary

markets for American account, the imports during January, February, and March exceeding the entire receipts for the year 1893. During the latter part of February prices began to ease off and a steady gradual decline brought the selling value down to \$1.95, partly due to a reconsideration of the duty question, which replaced opium on the free list, but lack of demand and absence of speculative interest had much to do with the shrinkage. About two weeks ago the trade was surprised by the receipt of cable advices from primary sources of supply to the effect that the growing crop had suffered considerable damage by drought and extreme heat, and that values were 1s. 3d. higher. Prices here immediately reacted to \$2.25, but little confidence was felt in the stability of the advance, and the continued absence of important orders influenced an easier feeling, and the closing quotation for single cases is \$2.10.

The fluctuations in opium influenced corresponding vacillations in morphine, but they were less frequent, and the market has not been very much disturbed during the year. On July 1, 1893, manufacturers' quotations were on the basis of \$2.30 to \$2.35 for eighths. No change was made until the middle of November, when a decline of 10 cents per oz. was announced. In February, while opium was practically at its highest point, manufacturers advanced their prices to \$2.35 to \$2.40, and subsequently in the same month to \$2.45 to \$2.50. The latter range prevailed until April, when values were reduced to \$2.35 to \$2.40. In May a further reduction was made to \$2.25 to \$2.30, and last month \$2.15 to \$2.20 was the ruling range, with the market devoid of noteworthy feature.

Quinine has improved almost steadily during the entire year, fractional advances being recorded in each successive month from July to February, and since then the declines have been slight and of no special significance. Consumption has been of average proportions, and the general conditions of the market has been considered satisfactory. While no claim is made that the manufacturers abroad have formed a combination, it is conceded that some arrangement exists whereby harmonious action is assured, and the operations of the larger consumers have been conducted with a greater degree of confidence than formerly. The ruling price for foreign in bulk, in July, 1893, was 18½ cents, and frequent advances brought the range up to 24 to 24½ in February, but the value has since fallen off about one cent per oz., leaving the final range 23 to 23½, with a few outside speculative holdings available at 22½. The various sized packages of American which in July, 1893, were quoted 22 to 29 cents, are now held at 27½ to 34½.

Among the acids the only noteworthy changes are in citric, tartaric and salicylic. The first named has steadily declined from 44½ cents in July, 1893, to 40½ in May of this year, and the latter price is still current. Tartaric shows a loss of 2 cents per pound for the year, mainly in consequence of competition

between makers. Salicylic dropped 15 cents per lb. on June 1, and the decline was attributed to sharp competition between manufacturers who, on that date, announced their willingness to accept 97 cents for 500 lb. lots, \$1 for 100 lb., and \$1.02 for smaller quantities.

The oils showing improved values include anise and cassia, both of which are higher in consequence of scarcity in China, where the former has met with a heavy demand, especially from Europe. Caraway, coriander and croton have sympathized with advances in raw materials. Lemongrass is firmer, owing to scant supply of fine quality and an extraordinary consuming demand from Europe. Oil rose is about 30 per cent. higher, and the improvement is attributed to three successive short crops. Peppermint has not developed any new features worthy of special comment, and the limited fluctuations during the year were chiefly caused by supply and demand.

Among the gums the more noteworthy change has been in refined camphor, which was quoted at 50 cents in barrels on July 1, last year, and has since been steadily sagging until the present time when refiners are willing sellers at 37 cents. Asafoetida was considerably disturbed in January last, owing to the resurrection by the Appraiser's Department of an old Treasury ruling which had been obsolete for many years. It prohibited the importation of asafoetida testing under 50 per cent. of resin soluble in alcohol. Considerable consternation was created among importers and dealers, it being a well known fact that fully 75 per cent. of all importations during the previous ten years would not have passed under the decision. The result was that a great many arrivals were condemned and ordered to be returned, thereby reducing stocks materially and causing holders to advance prices about 100 per cent. on the lower grades, which had been receiving the larger share of attention from consumers. The market has settled down to a more stable basis, and while the range a year ago was 10 @ 28 cents as to quality it is now 15 @ 23.

Cod-Liver Oil has been attracting considerable attention, particularly since the result of the last season's output became known in March last. During the fiscal year, up to and including February, the better grades did not vary much from \$19, but reports from primary markets that the output would be much below the average, owing to the lean condition of the livers, resulted in a decided upward tendency in values both here and abroad. There was a steady advance here to \$32 to \$35 according to brand and holder, but the opportunity to realize a handsome profit occasioned rather free selling and a reaction in prices to \$27 to \$28 for the well known brands, and \$25 to \$26 for other varieties of prime. Those ranges now represent the views of sellers, and the market presents a steady appearance, with the general outlook favorable to holders during the coming consuming season.

Read the "trade notes" and the market review every issue if you want to keep posted.

Notes on Prices.

English Chemical Market.

S. W. Royse & Co., Manchester, comment as follows on the position of the general chemical market: With the exception of the tar products branch, in which we are glad to be able to note some improvement, there has latterly been little of special interest occurring in the general chemical trade; prices indeed are in general well-maintained, but the amount of business doing has been only moderate. Crude carbolic acid has been selling better and is dearer, but business is stopped for the present as buyers do not see their way to the higher prices now asked. Creosote also is firm, but benzoles are only quiet. In alkalies the prices are nominally unchanged; caustic soda has just a fair inquiry, but has perhaps a slightly easing tendency; ammonia soda is moving slowly and soda crystals and bicarbonate of soda are quiet. The demand for bleaching powder is well up to the supply, and prices are quite firm. The Board of Trade returns continue, however to be unsatisfactory; there is a further decline in the exports in May, and during the five months ended May 31 last, as compared with the corresponding period of 1893, they show in bleaching materials a decrease in weight of 7,829 tons and in value of £73,886; and in alkalies a decrease in weight of 31,683 tons, and in value of £280,438. Acetates of lime are quite firm, and are expected to be dearer as the production in America is reported to be considerably decreased. Acetates of lead are steady, but only moving slowly; acetate of soda also is still slow of sale. Nitrate of lead has at present a much better inquiry. Carbonate of ammonia is unchanged, but murate of ammonia is more plentiful and rather easier in price. Sulphate of copper has lost ground, and has still an easing tendency. Green copperas has at present very little inquiry, but appears to have reached bottom figures. Carbonate and caustic potash have a fair demand. Yellow prussiate of potash is selling at less than syndicate quotations. Prussiate of soda has advanced strongly and is scarce on spot. Borax is still selling at low prices. Oxalic acid is firm, though quiet.

Review of the Wholesale Market.

NEW YORK, June 27, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently accounts a wide range of prices.

The volume of business in drugs, dyes and chemicals, does not appreciably increase. The demand is yet of a light and unsatisfactory character, and a quiet market is expected during this and the first half of the coming month. Complaint regarding the difficulty of forwarding goods to points affected by labor troubles is becoming more general and many are free to state that business is restricted by the obstacles now existing to railroad communication. Prices continue firm upon most lines, as it is believed among holders that additional concessions would not tend to an increased distribution, buyers being apparently content to cover immediate wants only. Alcohol has advanced. Nitrate of silver has declined. Citric acid is lower. Opium is weak and prices have receded. Camphor is offered at lower prices. Quinine is offering with greater freedom.

ADVANCED.

Alcohol.
Canary seed.
Curacao aloes.
Coriander seed.
Acetate of lime.

DECLINED.

Nitrate of silver.
Opium.
Camphor.
Senega root.

DRUGS.

ALCOHOL has been advanced by the Trust to \$2.25 @ \$2.28 per gallon as to quantity. This marks an increase of six cents on previous prices, and it is expected that it will have the effect of causing a corresponding advance in the price of ethers and other alcoholic preparations.

ANNATO has been inquired for to some extent of late, but the available stock is small and held at 27c.

BALSAM COPAIBA is maintained steadily at full previous prices, and a fair demand is experienced. Central American held at 33 @ 38 as to quality and quantity.

BALSAM FIR continues dull and prices are irregular. New crop Canada has sold to the extent of 20 barrels at \$2.25 @ \$2.40. Oregon is steady at 75 @ 80c.

BALSAM TOLU is in better supply, but the distribution is yet confined to small and unimportant lots; current sales at 25 @ 26c.

BARKS of the various kinds show no material change; the inquiry is limited at the moment to small jobbing lots.

BUCHU LEAVES, short, are in good supply, owing to recent arrivals, but prices are unchanged at the previous range; quoted 8 @ 9c. Long are dull at 24c.

CACAO BUTTER continues held at 31 @ 31½c., with jobbing parcels moving out at this figure.

CHAMOMILE FLOWERS, new crop, German, upon spot, are offered at 20 c. and forgood to prime, old, holders are now willing to accept 16 @ 18c. Roman are quiet at 15 @ 18c. for best quality.

COD LIVER OIL, Norwegian, remains quiet, but the market retains a steady appearance. From primary sources, best brands are not offered below the quotations named for some time past, holders there preferring to take the chances of the market this coming Fall. We quote the range at \$25 @ \$28.

ERGOT continues extremely dull, with the tone of the market easy. German (Russian) is held nominally at 21 @ 22c., and Spanish 23 @ 25c., but these figures it is said can be shaded perceptibly upon a firm bid for quantities.

GUARANA continues held at 90c. @ \$1, with numerous small sales at the inside figure.

MANNA, small flake, is in fair demand and prices are steady at 31 @ 32c., which is about on a par with the cost to import.

MENTHOL does not vary from \$5.50 @ \$5.75, with the stock small and concentrated.

MORPHINE does not develop any new feature of importance; values are nominally unchanged at the previous range of say \$1.90 @ \$2.15 for bulk and \$2.15 @ \$2.80 for eights.

OPIUM has not maintained the recent upward movement, and the market is again weak and irregular, with prices marked down to nearly the former range. Cases are offered at \$2 @ \$2.05, and it is believed that less would be accepted upon a fair bid; though the opinion prevails in some quarters that a duty of \$1 or \$2 will yet be imposed before the new tariff measure becomes law; it may be accepted as a certainty, that the article will remain where it has been placed—upon the free list. For jobbing parcels the quotation is now \$2.05 @ \$2.07½; powdered is held at \$2.80 @ \$2.85.

QUININE appears to offer with increased freedom, though prices are maintained at the previous range. Foreign brands are quoted $22\frac{1}{2}$ @ $23c.$ from outside hands, though we hear of some parcels of common brands offering as low as $22c.$

SAFFRON, American, is weak and unsettled, with the nominal range of the market 21 @ $25c.$ as to quantity.

SENNA LEAVES are meeting with a good jobbing inquiry, with numerous small sales at the previous range of 18 @ $25c.$ for natural Alexandria, and 5 @ $15c.$ for Tinnivelly.

VANILLA BEANS continue in good jobbing request, and firm at $\$6.50$ @ $\$13$ for whole, as to quantity.

DYESTUFFS.

CUTCH is held firmly in view of the limited stock at present available. Prime quality stock quoted $5\frac{1}{2}$ @ $6c.$, block 6 @ $6\frac{1}{2}c.$; ordinary slab $6\frac{1}{2}$ @ $7c.$, and MM do. $8\frac{1}{2}$ @ $9c.$

GAMBIER continues dull, but holders manifest no disposition to urge sales at a concession. Steamer lots ex-store are held at $3\frac{1}{2}c.$, and sail 4 @ $4\frac{1}{2}c.$ as to quantity.

NUTGALLS, Blue Aleppo, remain quiet; jobbing sales are making at 13 @ $13\frac{1}{2}c.$

SUMAC, Sicily, remains at $\$67.50$ @ $\$70.$

CHEMICALS.

ARSENIC, white, continues in moderate inquiry, though the larger consumers are said to have covered their requirements for the time. Importers quote at $3\frac{1}{2}$ @ $3\frac{3}{4}c.$ as to brand and quantity.

BLEACHING POWDER is in moderate request at the range of $\$2$ @ $\$2.25$ as to make, quantity and package.

ACETATE OF LIME continues scarce, and supplies are offered sparingly. Brown held at $95c.$ and $\$1.$, and grey at $\$1.65$ @ $\$1.70.$

BORAX is maintained at about previous values, though lower prices are promised under the new tariff. Refined offers at $8\frac{1}{2}$ @ $8\frac{3}{4}c.$, and concentrated $7\frac{1}{2}$ @ $7\frac{3}{4}c.$

CALOMEL, Howard's English, has again been reduced, the New York agent being prepared to accept orders at $75c.$

CARBOLIC ACID is meeting with better inquiry, and we are reported numerous small sales of English in drums at $12\frac{1}{2}c.$ and bottles $20\frac{1}{2}c.$

CHLORATE OF POTASH continues inactive and the market is dull. German crystals quoted at $13\frac{1}{2}c.$ and English $13\frac{3}{4}c.$

CREAM TARTAR, powdered, continues to offer at $17\frac{1}{2}$ @ $17\frac{3}{4}c.$, but the demand is yet limited to small and unimportant jobbing lots.

CITRIC ACID has been reduced by domestic makers to $40c.$ in bbls., and $40\frac{1}{2}c.$ in kegs, the decline in value being created by a corresponding reduction in foreign markets.

NITRATE OF SILVER has declined $1\frac{1}{2}c.$ per ounce, the quotation now standing at $41\frac{1}{2}$ @ $43c.$ as to quantity, the inside price for lots of 1,000 ounces. At the close the market was steady at the decline.

OXALIC ACID appears to be improving in position, though $6\frac{1}{2}c.$ is yet named in exceptional instances. Most holders quote $6\frac{1}{2}$ @ $6\frac{3}{4}c.$

QUICKSILVER continues to sell fairly in a jobbing way at the range of $59\frac{1}{2}$ @ $60c.$

ESSENTIAL OILS

ANISE is held at full previous prices, though there is no special inquiry for quantities in excess of jobbing orders. We quote the range at $\$1.50$ @ $\$1.55.$

BERGAMOT remains at $\$1.75$ @ $\$2.$ with trade, however, of a very moderate character.

CASSIA continues to offer at $82\frac{1}{2}$ @ $85c.$, with, however, only a limited distribution at this range.

CLOVE remains at 50 @ $52\frac{1}{2}c.$, but there is no action of any consequence noticed in the market.

LEMON AND ORANGE are meeting with about the usual amount of attention, with sales making at $80c.$ @ $\$1.35$ for the former, and $\$1.35$ @ $\$1.40$ for the latter.

PEPPERMINT, HGH, is in good position. Advices from London report large sales in that market at $12s. 7\frac{1}{2}d.$ We quote the range steady at $\$2.30$ @ $\$2.60$ for bulk, and $\$2.90$ @ $\$3$ for HGH.

GUMS.

ALOES, Curacao, are actively inquired for, and among other transactions we are reported sales of 3,000 lbs., cullings at $3c.$, the same being good ordinary quality in boxes. We quote the range at $3\frac{1}{2}$ @ $3\frac{3}{4}c.$

ARABIC appears to be moving into stronger position at primary sources, and values here are improving in consequence.

CAMPOR, domestic has declined owing to competition with the foreign article; barrels and cases are now quoted 36 @ $37c.$ Japanese is offered at $36c.$

ASAFOETIDA continues held at 15 @ $25c.$; of Calcutta we are reported sales of 17 cases at 22 @ $24c.$

CHICLE is in better supply, though prices are yet maintained upon the old level of 25 @ $26c.$

KINO of the better grades are extremely scarce and held at full $\$1.40.$

SHELLAC continues dull and inactive; prices are without quotable change.

TRAGACANTH is firmer, and recent advices from London seem to indicate a rising market.

ROOTS.

ACONITE, ALKANET, and ALTHEA are without special change; small sales at quotation.

GINGER, Jamaica unbleached, is strengthening and an early appreciation is looked for. Inferior grades are now held at $12\frac{1}{2}c.$ as an inside price, and up to $14c.$ is asked for best qualities. Bleached quoted 15 @ $17c.$

IPECAC remains quiet at the previous range of $\$1.05$ @ $\$1.15$ as to quality.

JALAP continues slow of sale though there is no pressure making upon the part of either importers or jobbers to urge the distribution. We quote prime grades at 15 @ $20c.$

SARSAPARILLA, Mexican, is in limited supply and under close control of jobbers. For limited quantities $9\frac{1}{2}c.$ is asked.

SENEGA continues to offer upon the spot at $37c.$ and to arrive at $33c.$

SEEDS.

ANISE does not vary either in price or demand. We quote the range at $8\frac{1}{2}$ @ $10c.$ for Italian.

CANARY is maintained in strong position, cable reports indicating a strong and rising market for Smyrna. The stock here is under pretty good control and held at $2\frac{1}{2}c.$; Sicily is firm at $3\frac{1}{2}c.$ @ $3\frac{3}{4}c.$

CELERY is meeting with more inquiry, and we are reported sales of 12 bags at $12c.$, but quotations now are comparatively steady at 13 @ $13\frac{1}{2}c.$

CORIANDER is scarce and firm at $9c.$ and higher prices are looked for before the receipt of new crop.

Hemp, Russian, is offered in instances at $1\frac{1}{2}c.$, but an appreciation in values is expected soon.

MUSTARD and other staples are without important change.

Wholesale Druggists' Prices.

We note below the important changes which have taken place during the past fortnight in the prices at which retailers purchase goods in ordinary lots.

ALCOHOL has advanced 6 cents per gallon.

BORACIC ACID, powdered, has declined from 24 @ $27c.$ to 20 @ $25c.$

CITRIC ACID, crystal, has declined 42 @ $47c.$; the former price was 43 @ $50c.$

ALOIN has declined from 18 @ $22c.$ to 14 @ $16c.$

AMMONIUM, Bromide, has advanced from 55 @ $58c.$ to 60 @ $65c.$

ST. IGNATIUS Beans have advanced from 35 @ $40c.$ to 65 @ $75c.$

BISMUTH, Subcarbonate, has declined from $\$2.60$ @ $\$2.75$ to $\$1.75$ @ $\$2.$; and subnitrate from $\$2.15$ @ $\$2.25$ to $\$1.65$ @ $\$1.75.$

CAMPOR has declined from 42 @ $48c.$ to 37 @ $45c.$

CREOSOTE, Beachwood tar, is now quoted $\$1.40$ @ $\$2.50$; the former quotation was $\$1.40$ @ $\$1.50.$

ETHER, Acetic, has declined from 68 @ $75c.$ to 55 @ $60c.$

GELATIN, Cooper's, has declined to 40 @ $47c.$; the former quotation was 70 @ $75c.$

OPIUM is now quoted $\$2.20$ @ $\$2.40$, the previous quotation being $\$2.25$, and powdered formerly quoted $\$3.25$ has declined to $\$3$ @ $\$3.25.$

ICHTHYOL is quoted $\$5.75$ @ $\$6.$, previously at $\$6.$

MORPHINE, Acetate, now quoted $\$2.20$ @ $\$2.30$; Muriate, $\$5.20$ @ $\$2.30$, and sulphate $\$2.20$ @ $\$2.35$; the former range was $\$2.35$ @ $\$2.50.$

Montserrat Lime Juice.

The articles which have appeared in our columns recently on lime juice and the West India lime have served to direct considerable attention to the juice and its medicinal properties, and we learn from dealers that an increased demand has sprung up for this grateful and wholesome beverage. When we speak of lime juice we refer of course to the pure lime fruit juice of the Montserrat Company, which is the product upon which the great reputation of lime juice as a beverage and a medicinal agent has been built. The sale of the Montserrat lime fruit juice is being actively pushed in the United States by the Montserrat Company, and branch offices have been opened in Boston and New York, from which the goods are being shipped to all parts.

Pharmacists who desire to make an attractive display either on their soda counter or show cases will find it decidedly to their benefit to write to the Montserrat Company for a supply of show cards and descriptive pamphlets. Supplies of the lime juice can be obtained through any wholesale druggist, or direct from the New York agents, John M. Chapman & Co., 105 Hudson street, New York.

Seabury & Johnson, 59-61 Maiden Lane, this city, are placing on the market a new carbolated soap containing 5 per cent. of acid. The soap is put up in S. & J's. new air-tight container, and should command a wide sale. The package is extremely attractive and neat, and will commend itself particularly to travellers, as it does away with the necessity of providing a special soap container. Druggists who are careful to stock first-class novelties should immediately procure a trial lot.

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THE information contained in our Iowa correspondent's letter to the effect that the new liquor law of Iowa is driving many pharmacists (?) into the liquor business is no surprise to those who have watched the operation of the different liquor laws which have been tried in that State. The very latest enactment is in the nature of a local option measure, the citizens of cities of 5,000 population and over, being given the right to decide by vote as to whom shall be granted saloon licenses. In cities of less than 5,000, 68 per cent. of the voters must petition. It would seem that the new law has been

framed with a special view to regulating the sale of intoxicants by pharmacists or persons masquerading as such, for it is noted that several "druggists" have closed their "pharmacies" and gone boldly into the saloon business. That such action on their part will result in a material betterment of the condition of reputable members of the profession in Iowa, it is clear; and it is to be hoped that many more desertions of this kind will take place.

PROFESSIONAL CONFIDENCE VIOLATED.

THE relations which exist between patient and physician are scarcely less sacred than those between the penitent and the priest; in both the fullest confidence must be observed, and this the law realizes in declaring confidences received in the capacity of a physician or a priest as legally inviolable.

So well fixed is this principle both in practice and in law, that the public was shocked when it was reported that Dr. T. S. ROBERTSON of this city, who had at one time attended the labor leader EUGENE DEBS, professionally, had given it out publicly that Mr. DEBS had been a sufferer from dipsomania.

No better indication of the view which his professional brethren will take of the matter is to be had than the following opinion expressed by Dr. W. T. JENKINS, State quarantine officer for the port of New York, in an interview with a representative of the AMERICAN DRUGGIST, in which he says:

"If Dr. ROBERTSON has been rightly quoted he has been guilty of a gross and unpardonable breach of professional confidence in giving out to the public a statement in regard to Mr. DEBS' physical ailments based on knowledge gained in the course of professional treatment. Even on the witness stand the relations of the physician and the patient are treated with the same sanctity as those of the penitent and the priest, and in this instance if Dr. ROBERTSON really did give out the information attributed to him he has forfeited the respect of the entire medical profession."

Dr. ROBERTSON has, it is true, denied the responsibility for having given out the information that he had been treating Mr. DEBS professionally. Even if this denial be admitted, he appears to have confirmed the rumor, when asked about it by newspaper men and to have discussed the case at some length, if we can rely upon the published interviews. This itself would constitute a most serious breach of professional etiquette.

It is not with Dr. ROBERTSON or with Mr. DEBS, however, that we have to do; their personality is merely an incident serving to direct attention to the lofty confidence reposed in the medical profession by the public. The universal condemnation with which this reported breach of professional confidence has met both at the hands of the laity and of the medical profession, will, no doubt, prove a salutary lesson to any weak-kneed medical man who may feel tempted to resort to unethical methods of self-advertising.

HIGHER LICENSE OR RE-REGISTRATION.

THE State Pharmacy Board of New York has been unable for some time back to perform its duties in an effective manner, owing to a lack of adequate funds. At the last annual meeting of the State Pharmaceutical Association the matter was ventilated to some extent, with the result that a resolution was adopted calling upon the legislative committee of the association in conjunction with the State Board to move in the matter of devising means to increase the revenues of the board. The resolution concluded with a recommendation to the effect that an effort be made to have an act passed retaining the present fee for original registration and adding a sufficient yearly fee for re-registration to meet expenses.

If carried out, the proposed change will make it necessary for the pharmacists of all counties affected by the State Act to pay a stated annual renewal fee to keep their licenses in force.

The apathy displayed in this matter by

Tellurium in Bismuth Preparations.—Janzen observed that a brown color develops in adding chloride of tin solution to a specimen of bismuth subcarbonate which he had reason to believe was free from arsenic. The absence of arsenic was shown by testing with zinc in acid solution and with silver nitrate paper. Further investigation proved the presence of a small proportion of tellurium.

An Effervescent Purgative Lemonade.—The *Journal des Praticiens* for May 30 publishes the following formula, by Dr. Constantin Paul, who recommends it on account of its rapid action (in two or three hours) and its being tolerated: Sodium phosphate, 375 grains; distilled water, 8 ounces; syrup, 1 ounce; tincture of lemon, 25 drops; citric acid and sodium bicarbonate, each, half a drachm.

The Incompatibles of Chloride of Lime.—Professor Jorissen gives an account of some experiments on the incompatibilities of this body, amongst which the chief are the following, on account of the dangers of explosion, glycerin (unless diluted with water), fats, oils and essences, iodides and ammonium chloride. In the latter case there is some danger of nitrogen chloride being formed.—*Journal de Pharmacie d'Anvers*.

Hyananchin is a chemically indifferent, crystalline bitter substance found in the seed and seed-hulls of the *Hyananche globosa*. It passes unchanged through the digestive organs of the cat and the dog and can be extracted from the urine by agitating it with ether. In the pharmacological system hyananchin stands near strychnine but affects the brain rather more than the spinal chord. Hyananche belongs to the family buxaceæ, and a similar poison is discovered in the *buxus semper virus*. A. Englehardt, *Deutsch. Med. Zeit.*, 1894, p. 459.

Kaputine consists of acetanilide (anti-febrin) colored, says the *British Medical Journal*, and continues: It is an article which ought not to be used by persons unacquainted with its properties and the probable effects it may produce. Like several other of the new synthetic remedies, it should be added to the poison schedule, and its sale placed under proper regulation in the hands of competent persons. It appears highly improper and dangerous that such an article should be puffed and supplied as a quack nostrum without any label indicative of its nature, to warn persons who might be injuriously affected by its administration.

Lactophenin.—has the composition $C_8H_7(OC_2H_5)_2NH.OH.CH_3$. It is somewhat more soluble than phenacetin. It consists of colorless, odorless, small slightly bitter crystals melting at 117.5 to 118°C.; soluble in 50 parts of water at 15°C. and in 55 parts of boiling water and in 8.5 parts of alcohol at 15°C. The solution is neutral to litmus paper. It is difficultly soluble in ether or petroleum ether. Boil 0.1 gramme of lactophenin with 1 c.c. of hydrochloric acid for a minute and a yellow color develops; dilute the solution with 10 cc. of water and filter

after cooling and the solution will turn ruby red on the addition of three drops of chronic acid solution.—*Pharm. Centralhalle*, 1894, 358.

The Employment of Cocaine as an Antigalactic.—In the *Lyon Medical* for May 20, Dr. Joire writes that he has observed that cocaine used in cases of painful cracking of the nipple diminishes the lacteal secretion, and that this fact suggested to him the idea of employing it in a regular manner in cases where the patients desired complete suppression of this secretion. The author employs the following solution: Cocaine hydrochloride, seventy-five grains; distilled water, an ounce and a half; glycerin, an ounce and a half. This solution is applied with a soft brush five or six times a day, and suppression of the secretion is obtained in from two to six days. There is never any inconvenience from the use of this solution on account of the surface painted being so limited. Cocaine, by producing anaesthesia of the nipple, hinders its erection, which, according to M. Joire, prevents the secretion.

Copra oil for Suppositories.—Copra oil is the name given an oil of high melting point which seems to consist of coconut oil freed probably by expression, from the more liquid portions of the oil. It melts at 30.3°C. and congeals at 28°C. (cacao butter melts at 31 to 32° and congeals at about 23°C.) Copra oil is recommended as a succedaneum for cacao butter for making suppositories. It contracts considerably on congealing and thus is easily taken out of the moulds. Experiment showed that suppositories of copra oil were solid within ten minutes after being poured into the mold and had a polished surface whereas 50 minutes were required for solidifying the cacao butter suppositories. The method of making suppositories is the same with both oils. Copra oil will, it is said, take up 50 per cent of water. Copra is the name of the cut and dried cocoanuts imported from the South Sea Islands.

The Browning of Oakwood.—According to the *Moniteur Industriel*, the dark oak employed in decorative woodwork is prepared by submitting the wood to the action of ammoniacal vapors, which rapidly give the dark tint that is in so much request. The method consists simply in arranging the material to be rendered of a dark color in a tight room into which no light penetrates. For small pieces, a large box whose joints are closed with strips of paper glued to the places whence the vapor might escape fully suffices. For larger pieces there should be a hermetically closed room. Into the box or room are put several flat glass vessels containing liquid ammonia, and placed upon the floor so that the vapor may fill the space and give the tannin of the oak a very dark brown color, which will not be altered if a little of the wood be removed from the surface. The liquid should not touch the wood, and the depth of the color will depend upon the quality of the ammonia employed and the length of time of the exposure to its fumes.

Effects of Pressure on Chemicals.—Some remarkable results obtained by Lea, in subjecting salts of various substances to great pressure in a powerful screw vise, have led to conclusions not heretofore recorded in chemical investigations. The area treated was about one-eighth of a square inch, and the pressure treated was in the proportion of over a million pounds to the square inch, or about seventy thousand atmosphere—these of course, being calculated pressure, subject to considerable reduction for friction. Certain salts of iron, silver, potassium, platinum, mercury, when subjected to the pressure were visibly affected, the color being changed. The opinion, therefore, expressed by Lea, is that many of the salts of easily reducible metals, especially of silver, mercury, and platinum, undergo reduction by pressure; and as such reductions are endothermic, it consequently follows that mechanical force can bring about reactions which require expenditure of energy, which latter is supplied by mechanical force in the same way that light, heat, and electricity supply energy in the endothermic changes which they bring about.

Compound Tincture of Coal Tar.—Duhring (*Am. Journ. of the Med. Sciences*), from a trial of many formulas concludes that the best tincture of coal tar is made with the aid of tincture of quillaia. That the strength of the tincture of quillaia should be 1 to 4, with 95 per cent. alcohol. That the coal tar (1 part) should be digested with the tinct. of quillaia (6 parts), with frequent agitation, for not less than eight days, and preferably for a longer period, and finally filtered. The resultant product is a brown-black clear tincture, which upon the addition of water forms a cleanly yellowish emulsion, the color and certain other characters varying with the kind of coal tar employed. The tincture is stimulating, and is prescribed usually largely diluted, with from 10 to 60 parts of water as a wash; and is useful where tar is indicated, as in certain forms of eczema, psoriasis, pruritus, and in other inflammatory diseases of the skin. It is often more useful when employed weak than strong. This preparation, which may be designated as "compound tincture of coal tar," takes the place of several similarly composed proprietary preparations as "liquor carbonis-detergens" and "coal tar saponine."—*Phila. Polyclinic*.

Crystalline Guaiacol.—Since the careful researches of Béhal and Choay on this interesting body, much interest and care have been bestowed on its manufacture. The properties of the pure compound and its derivatives have also been carefully studied. The following results have been obtained in the laboratory of Dr. Thoms. The specific gravity of three pure samples lay between 1.1355 and 1.1370 at 18°C. The melting point of the three samples, taken in capillary tubes, were 28.5°, 28.5° and 28.25°C. Seifert has given 32° as the melting point, which is now considered too high. The solubility in water was found to be 1 in 50. The behavior on distillation was found to be fairly constant in all three cases. Of

sample No. 1, 88 per cent. distilled at 203.85°C.; of sample No. 2, 90 per cent. distilled at this temperature; and of No. 3, 80 per cent. distilled between 203° and 203.85°C. The solidifying points were 28.25°, 28°, and 27° respectively. The benzoyl compound prepared by the action of benzoyl chloride and potash on guaiacol, when purified by crystallization from alcohol, was found to melt at 58.5° in all three cases.—*Apotheker Zeitung*.

Preparation of Thyroid Extract.—Dr. Willy Sieck gives the following method for the preparation of extract and pills of the thyroid gland. Take the fresh thyroid glands of the calf or the sheep, free carefully from fat and membranous tissue, chop fine and macerate with glycerin (2 parts of glycerin to 1 of thyroid) at the ordinary temperature for 24 to 26 hours. If allowed to stand either a longer or shorter time the yield, curiously, is less. Express with a hand press and to the liquid obtained add alcohol until no further precipitation occurs. Throw this precipitate on a filter placed in a funnel, the nose of which is fitted with a rubber tube bearing a pinchcock. After washing out the glycerin thoroughly by means of alcohol close the tube, pour a little more alcohol and ether on the precipitate, put the moist precipitate into a porcelain evaporating dish and add a weighed quantity of infusorial earth, mix well and allow the alcohol and ether to evaporate. By deducting the weight of the infusorial earth added from that of the finished product the exact quantity of extractive present can be determined. The extract thus obtained is almost entirely odorless. The use of powdered vegetable substances, as liquorice instead of the infusorial earth is not advisable as a leathery mass is the result. The alcohol used can be recovered by distillation and used repeatedly. By addition of powdered althaea and liquid extract of liquorice pills may be readily formed. (*Pharmaceut. Zeitung*, 1894, p. 428.) Thyroid glands are made into pills by Dr. Benzon of Copenhagen, by the following method:—The glands are freed from grease and enveloping membranes, then finely divided, spread in thin layers on plates, and dried in a stove, at a temperature between 40° and 50°. When dessication is complete the matter is powdered, then washed with ether to remove any remaining traces of fat. Finally, the powder is massed with simple syrup, and the pills when cut are rolled in cocoa to mask the odor of the glands.

MIXTURE FOR THE RADICAL CURE OF EPI- THELIOMA.

[DR. GAVINO.]

Fuming nitric acid..... 10 3jss
Perchloride of mercury..... 4 3j
Filtering paper..... ad. consist. syrup.

Mix.—For external use.

This remedy is applied with the aid of a cotton brush, the cauterization being repeated in ten or twelve days. This is sufficient to cause the most voluminous tumor to become detached, and complete cicatrization takes place rapidly.

Dr. Bremer's Extraction Apparatus.

Fig. 2 in the accompanying illustration shows the apparatus as adjusted for liquids which are heavier than the extraction fluid, while Fig. 3 shows the apparatus to be used where the extraction fluid has the greater specific gravity. The apparatus can be made of from 10 to 50 c.c. capacity according to the quantity of liquid to be treated. The illustrations need no detailed description. The sieve at the point where the extraction fluid enters divides it up so as to have no waste space.

Hagemann's Extraction Apparatus.

In Figure 1 the fluid to be extracted is in the container A which is filled to the point a. The extraction fluid is in the flask B, the vapor ascending through the rising tube R₂ into a spiral made of glass S provided with a number of fine openings with side through which the vapor enters into the liquid to be extracted, is condensed

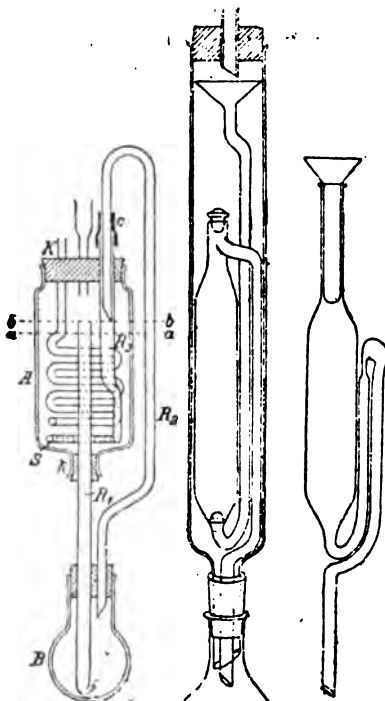


FIG. 1. FIG. 2. FIG. 3.

and rises to the surface in innumerable small drops. The other layer collects above and eventually flows back as soon as it reaches the height b b through the glass tube R₁ into the boiling flask. To avoid the gradual heating of the liquid in B a condenser K is sunk in it. It is essential that it be kept boiling steadily and uniformly.

This apparatus can also be used with menstrua heavier than the liquid to be extracted. For this purpose a tube open at both ends and a little larger than R₁ should be fitted over R₁. Before putting in the fluid to be extracted the bottom of the vessel B must be covered so deep with the menstruum that the lower end of this tube will be beneath the surface of the liquid.—*Pharm. Zeitung*.

Extracts from the Sixth Edition of the Dieterich's Pharmaceutical Manual.*

(Continued from Page 7.)

(Where the word parts is used parts by weight is meant.)

AROMATIC COD LIVER OIL.

	Parts.
Cod liver oil.....	1,000
Lemon oil.....	5
Oil of neroli No. 00.....	2
English peppermint oil.....	1
Vanillin.....	0.1
Coumarin.....	0.01

Dissolve the last two ingredients in the ethereal oils by the aid of a gentle heat and mix the solution with the cod liver oil.

IODO-FERRATED COD LIVER OIL.

	Parts.
Iron, in fine powder.....	2
Iodine.....	4
Ether.....	10
Cod liver oil to make.....	1000

Rub the iron, iodine, ether, and 40 parts of cod liver oil together until a black mixture results, then add sufficient cod liver oil to render the whole up to 1,000 parts by weight.

KOLA CHOCOLATE.

	Parts.
Cacao.....	405
Powdered sugar.....	450
Roasted kola nut in No. 30 powder.....	100
Cacao butter.....	25
Vanilla sugar (0.5 per cent. triturate of vanilla).....	5
Distilled water.....	15

Rub together in a warm mortar to a uniform paste.

WAX PASTE.

PASTA CERATA.

	Parts.
Yellow beeswax.....	27
Cocoonut oil.....	8
Lanolin.....	4
Borax.....	1
Distilled water.....	60

Melt the wax and oil together and after cooling somewhat add the lanolin and finally gradually add the solution of the borax previously dissolved in the distilled water.

THIOL PASTE.

PASTA THIOLI.

	Parts.
Liquid thiol.....	3 to 10
Distilled water.....	30
Glycerin.....	30
Dextrin.....	30

Dissolve by the aid of heat and then stir until cool.

BORO-SALICYLIC ZINC PASTE.

PASTA ZINCI BORO-SALICYLLIS.

	Parts.
Zinc oxide.....	5.0
Starch.....	5.0
Boracic acid in No. 30 powder.....	1.0
Salicylic acid.....	1.0
Iodoform.....	0.2
Lead plaster.....	14.0
Mutton tallow.....	14.0
Petrolatum.....	60.0
Peru balsam.....	0.2

CONCENTRATED TAMARIND PULP.

Stir 1,000 parts of crude tamarinds with 2,000 parts of hot water, allow to stand six hours and rub through a hair sieve No. 25, with a wooden spoon, gradually passing 1,000 parts of hot water through the sieve. Now place the marc in a linen purse bag and press

*Translated for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

between wooden plates until the residue weighs not more than 500 parts. Evaporate the strained liquid to a soft consistence and incorporate the pressed out marc and add 1 part of sugar to each four parts of this juice.

ALUMNOL DUSTING POWDER.

	Parts.
Alumnol.....	10
Talc, powdered.....	45
Wheat starch, powdered.....	45

This is useful for applying to ex-coriated surfaces, mild burns, sweaty feet, etc.

RED WINE PUNCH ESSENCE.

	Grammes.
Red wine.....	550.0
Arrac.....	500.0
Syrup of sour cherries.....	500.0
Sugar, in No. 30 powdered.....	250.0
Black tea.....	10.0
Fresh lemon peel.....	2.5
Juice of one lemon.....	3.0
Powdered archineal.....	3.0
Malva flowers, fruit of calyx.....	2.0

Heat the whole together to a temperature of 70 to 80°C. [154 to 187°F.], then allow to stand for twenty-four hours in the cold, and filter. Half of the arrac may be replaced by rum.

WHITE WINE PUNCH ESSENCE.

	Grammes.
White wine (Mosel).....	550
Arrac.....	450
Cognac.....	100
Cherry syrup.....	200
Sugar in No. 30 powder.....	250
Black tea.....	10
Juice of half a lemon.....	10

Heat the mixture to 70 to 80°C. [154 to 187°F.] and allow to stand twenty-four hours and filter. If a stronger lemon flavor is desired 2.5 grammes of fresh lemon peel may be added, but this should be allowed to remain in the mixture only a short while, as otherwise it will impart a bitter flavor to the essence.

Powdered Medicinal Soaps.

(According to Eichhoff).

The reprehensible course pursued by many foolish or ignorant manufacturers of so-called medicinal soaps during the past decade has done much to bring discredit upon this class of medicaments. To Unna belongs the credit of having anew directed the attention of physicians to the value of this form of medication. Unna gave the subject the correct foundation in that he studied the composition of the basic soap itself as well as that of the mixtures or medicaments to be incorporated therein. Unna furthermore introduced beside the already known alkaline soap two new forms of soap, the neutral and the super-fatted.

While Unna adhered to the soap in the form of cakes Eichhoff has introduced in addition the soaps in powdered form. These soaps supplement those of solid form in that being dry they are better adapted for preserving mixtures of medicaments than the solid soaps, while on the other hand the latter alone (except for the fluid form) is available for use with the fluid medicaments.

According to Eichhoff the powdered soap has another advantage in that a more accurate dosage is possible since the required quantity may be weighed off and only as much melted as is to be used at one time, thus effecting economy also.

The powdered soaps have an added interest for the pharmacist, because while the manufacture of the soap in

cakes requires some special machinery; powdered soaps can be prepared in every pharmacy. I publish here, therefore, the formulas of Eichhoff with a few modifications, rendered necessary in the pharmaceutical laboratory. It should be noted that Eichhoff as well as Unna used alkaline, neutral and super-fatted soaps. [See also page 57.]

A. SOAP BODIES.

As a basis for these soaps Eichhoff used a neutral soap composed of a mixture of 75 parts of neutral strain soap and 25 parts of medicinal soap.

ALKALINE POWDERED SOAP.

	Parts.
Neutral powdered soap.....	95
Exsiccated sodium carbonate in No. 30 powder.....	5

It is better to always mix fresh the basic soap body.

NEUTRAL POWDERED SOAP.

	Parts
Neutral stearin soap.....	75
Medicinal (castile soap).....	25

SUPER-FATTED POWDERED SOAP.

	Parts
Neutral powdered soap.....	95
Powdered cacao butter.....	5

I adhere to the order followed by Eichhoff even though this is not alphabetical. The number of the formulas can be largely increased. I have refrained from complicated explanatory Latin titles.

The soaps are made by simply mixing the powdered medicament with the soap body and each combination may be made with either a neutral, an alkaline or a superfatted base as above. [It is unnecessary to repeat the formulas, therefore, as in the original, and we will, therefore, merely give the percentage of the active constituents used, it being understood that the remainder is composed of the alkaline, neutral or super-fatted powdered soap as may be desired.—Translator.]

- (1.) Salicylic Soap: 5 per cent. salicylic acid.
- (2.) Salicyl Resorcin: 5 per cent. each of salicylic acid and resorcin.
- (3.) Salicyl Sulphur: 5 per cent. each of salicylic acid and purified sulphur, each 5 per cent.
- (4.) Salicyl Resorcin Sulphur Soap: Salicylic acid, resorcin and washed sulphur, each 5 per cent.

[The preceding are made only in the neutral, and the superfatted soap. Where not otherwise specified the combination is used with alkaline, neutral and superfatted soap.]

- (5.) Sulphur Soap: Washed sulphur, 10 per cent.
- (6.) Camphorated Sulphur Soap: Washed sulphur, 5 per cent.; camphor, 2 per cent.
- (7.) Peru Balsam Soap: Peru balsam and dried sodium carbonate in No. 30 powder, each 5 per cent., distilled water 2.5 per cent. Tritrate together, heat, stirring constantly until the mass can be powdered and then add 90 parts of alkaline powdered soap. This soap is only used in alkaline form.
- (8.) Sulphurated Peru Balsam Soap: Same as above, with addition of 5 per cent. of washed sulphur. Made in alkaline soap only.
- (9.) Sulphurated Naphthol Soap: Beta naphthol and washed sulphur, each 5 per cent.

(10.) Beta Naphthol Soap: Beta Naphthol, 5 per cent. Made only in superfatted soap.

(11.) Camphorated Soap: Camphor, 5 per cent.

(12.) Borax Soap: Borax, 5 per cent., not made with alkaline soap.

(13.) Children's Thymol Soap: Thymol, 2 per cent., not made with alkaline soap.

(14.) Benzoin Soap: Benzoin, 3 per cent. Not made with alkaline soap.

(15.) Pumice Soap: Powdered pumice stone, 20 per cent.

(16.) Chlorinated Lime Soap: Chlorinated lime, 10 per cent. With either neutral or alkaline soap.

(17.) Iodine Soap: Iodine 2 per cent. in superfatted soap. Must always be freely prepared.

(18.) Aristol Soap: Aristol, 2 per cent. in superfatted soap.

(19.) Eusophen Soap: Eusophen, 2 per cent. in superfatted soap.

(20.) Quinine Soap: Quinine sulphate 2 per cent. in either neutral or super fatted soap.

(21.) Chrysarobin Soap: Chrysarobin, 10 per cent. in either neutral or super fatted soap.

(22.) Pyrogallol Soap: Pyrogallol 5 per cent.

(23.) Iodoform Soap: Iodoform 3 per cent. in either neutral or superfatted soap.

(24.) Iodol Soap: Iodol 3 per cent.

(25.) Menthol Soap: Menthol 5 per cent.

(26.) Salol Soap: Salol 5 per cent. in superfatted soap.

(27.) Sublimate and Sodium Chloride Soap: Rub well together 2 parts of corrosive sublimate, 1 part of sodium chloride and 2 parts of stearic acid and mix this with 95 parts of superfatted soap.

(28.) Tannin Soap: Tannin 5 per cent.

(29.) Thiol Soap: Thiol in powder form 5 per cent.

(30.) Naphthalin Soap: Naphthalin 5 per cent.

(31.) Cantharidin Soap: Cantharidin 0.2 per cent. in superfatted soap.

iodo-CAMPHORATED OPODELDOC.

Dissolve 10 parts of ammonium iodide in 90 parts of ordinary opodeldoc [camphorated soap liniment.]

Sealing Wax.

In commerce the four different kinds of sealing wax are known as letter wax, package wax, tobacco wax (?) and bottle wax.

Since the commoner sorts must be extraordinarily cheap it is plain that they cannot consist of resin and coloring matter exclusively, but that mineral substances have been added to increase their weight. The appended formulas originated in a celebrated factory which has now abandoned their manufacture; they have been in the highest sense of the words practically tested, and give, I have found most excellent results.

The turpentine and resins should be melted together in an earthen (not metallic) pot over a gentle fire, preferably of charcoal, and stirred lightly

until the whole is melted. The mineral constituents are now added, gradually, from a fine wire sieve and stirred in thoroughly. The whole is then heated a few minutes to drive out the air which has been stirred into it, removed from the fire, and the turpentine oil and aromatic ingredients added.

To cool off to the consistency required for molding, pour off about a sixth of the mass on to a piece of wetted parchment paper, and as soon as this mass has about crystallized, return it to the vessels and stir until the cooled portion is dissolved, and then pour the mass into moistened sealing-wax molds.

Remove the sticks of wax from the molds before the wax is quite hard and lay them in rows of twelve on an iron plate which has been previously smeared

SYRUP OF LACTOPHOSPHATE OF CALCIUM.

	Parts.
Calcium carbonate.....	2.5
Lactic acid.....	6.0
Phosphoric acid.....	5.0
Syrup.....	500.0
Water a sufficient quantity.	

Dissolve the calcium carbonate by warming in a mixture of 6 parts of lactic acid 80 parts of water and to the solution add 5 parts of phosphoric acid. Now filter through a small filter and wash with sufficient distilled water to bring the filtrate up to 50 parts by weight. Mix this with the syrup.

SYRUP OF SQUILL.

	Parts.
Ceylon cinnamon, in coarse powder.....	5
Ginger, cut fine.....	5
Vinegar of squill.....	50
Sugar sufficient quantity.	

Macerate the cinnamon and ginger in

TABLE OF FORMULAS FOR SEALING WAX.

LETTER WAX.	Turpentine.	Rosin.	Turpentine Oil.	Pale Rosin.	Shellac.	Baryta.	Leitchshath.	German Cinnabar.	Carmine Cinnabar.	English Red.
Finest carmine, red.....	40	80	40		Red. 160	80	40		100	[Balsam tolu, 20]
Finest red a.....	60	120	40		Pale.					
Finest red b.....	40	120	40		200	100	80	80		[Lavender oil, 20]
Fine red a.....	60	200	40		240	240	100	80		
Fine red b.....	60	240	40		200	320	160	70		
Medium red a.....	60	320	40		200	400	200	60		
Medium red b.....	60	400	40		160	600	200	40		
Fine black.....	60	200	40		200	240	160	[Lampblack, 4]		
PACKAGE WAX.										
Medium brown.....	40	400	40		Brown.					
Medium red.....	40	400	40		120	560	240	30		80
Fine brown.....	40	820	40		200	400	200			80
Fine red.....	40	820	40		200	400	200	50		
TOBACCO WAX FOR SEALING TOBACCO PACKETS.										
Medium brown.....	200	600	40		120	1200				80
Medium red.....	200	600	40		120	1200		40		
Fine brown.....	200	400	40		200	600				80
Fine red.....	200	400	40		200	800		60		
BOTTLE WAX.										
White.....	160			600		700 [zinc white, 160]				
Yellow.....	160			600		120 [chrome yellow, 80]				
Sky blue.....	160			600		100 [Ultramarine blue, 80; zinc white, 80]				
Blue.....	160			600		100 [Ultramarine blue, 80]				
Pink.....	160			600		800 [Carmine, 40; zinc white, 160]				
Lilac.....	160			600		800 [Carmine, 40; zinc white, 160; ultramarine, 20]				
Red.....	160	600			1200	60 [Stearin, 100]				
Black.....	160	600			1200 [Lampblack, 4; stearin, 60]					
Gold, transparent.....	100				800 [Japan wax, 100; mosaic gold, 5]					
Silver, transparent.....	100				800 [Japan wax, 100; imitation silver leaf, 10]					

with ceresin and hold in a heated oven. The mass thus becomes so soft that the sharp corners become rounded off, and that it can be stamped with a business stamp. This having been done, lay the sticks of wax at once on a moistened marble slab, or in the absence of such slab, on thoroughly moist parchment paper.

It is understood that the mineral ingredients must be in the finest powder. It is also essential that they should be thoroughly mixed with each other before they are added to the resinous, mass.

In preparing bottle wax half of their colored matter should first be rubbed to a smooth paste with oil of turpentine, the other half being mixed with baryta and sifted into the mass, as in the other formulas for sealing-wax given above.

the vinegar at 15 to 20° C. (60-70° F.) for three days in a closed glass vessel, agitating occasionally, then express through a cloth stainer and in each forty parts of the strained liquid dissolve sixty parts of sugar.

SYRUP OF TEA.

	Parts.
Black tea.....	100
Boiling water.....	350
Sugar.....	600
Vanilla tincture.....	2

Pour the boiling water on the tea, allow to stand 30 minutes in closed vessel, press out gently, filter, and in 420 parts of the filtrate dissolve 600 parts of sugar. When cold add 2 parts of tincture of ginger.

Pharmacy Laws.

A recent issue of the *British and Colonial Druggist* contains the following synop-

sis of the pharmacy regulations in the United States:

In the following States all must undergo the State's examination: Washington, Mississippi, Nebraska, Ohio, Illinois, Rhode Island, Massachusetts, Michigan, Minnesota, New York (State), Wisconsin, Arkansas, Maine, New Jersey, Pennsylvania, Utah, West Virginia.

The following States accept graduates of regular colleges of pharmacy: Florida, District of Columbia, Iowa, Missouri, Oklahoma.

Georgia.—This State accepts the certificates of Germany, France, Great Britain, Ireland and Ontario. All others must submit to examination, but are allowed to practice until the regular meeting of the Board, provided they hold a certificate.

Virginia accepts the certificates of Great Britain and Ireland, but a bill is before the State Legislature which will render examination compulsory.

Louisiana accepts no pharmacy certificates. Pharmaceutical graduates of foreign universities are, however, recognized.

Wyoming.—The Pharmacy Law is a dead letter.

North Dakota will register persons if the Board be satisfied as to their standing and character.

Oregon accepts the English and Irish certificates.

Texas.—There is no State Board, but a separate Board for each judicial district, and each Board determines for itself what certificates will be accepted for registration.

Idaho.—No State Board. Each county decides as to what certificates it will accept.

California accepts all certificates where four years' experience is required, and attendance at two or more courses of lectures.

North Carolina recognizes the Ontario certificate, and would consider any other certificates submitted and decide on their merits.

Kings County, New York, will accept the higher diploma of any teaching school of pharmacy in any country.

Baltimore.—The city of Baltimore admits persons holding diplomas from recognized colleges of pharmacy, based upon a full four years' apprenticeship as a pharmacist. All other persons wishing to practice must be examined.

BENZINE SOAP.

I.

(Pharm. Centralhalle).

	Parts.
Castile soap shavings.....	1,500
Alcohol, 96 per cent.....	6,000
Benzine.....	10,000
Oil of turpentine.....	1,000
Dammar varnish.....	250 to 500

Dissolve the soap in 5,000 parts of alcohol on a waterbath, add 5,000 parts of benzine gradually and finally add a solution of 1,000 parts of oil of turpentine, 5,000 of benzine and the dammar varnish. This is said to be used in the so-called chemical laundries.

II.

	Parts.
Castile soap, in shavings.....	1,500
Oleim.....	250
Alcohol.....	6,000
Benzine.....	10,000
Oil of turpentine.....	1,000
Dammar varnish.....	250 to 500

Melt the soap and the oleim in a water bath and then add the other ingredients.

The Valuation of Drugs.*

Sanitary Commissioner C. C. Keller of Zurich, who has repeatedly contributed interesting articles on the above subject, published a valuable series of papers in the *Schweizerische Wochenschrift für Chemie und Pharmacie*, 1894, Nos. 5, 6, 7, 12, 13, on the valuation of the more important potent drugs, and from there we present the essential portions below:

GENERAL DIRECTIONS.

The author calls attention to the necessity of using uniform methods of assay in arriving at results to be adopted for the pharmacopoeia as the normal standard for drugs, and with this object in view suggests that results obtained by the Keller method be sent to him for the purpose of compilation. The general method for assay is the following:

The drugs must be dry and in a finely pulverized condition. The drying should not be conducted at high temperatures, but preferably in a dessicator over quick lime or sulphuric acid. The powder must be fine enough to pass through an 80 mesh sieve.

According to the percentage of alkaloid use from 10.0 to 20.0 gm. of the dry powder for the assay, or 12 to 25 gms. in the medical condition. The extraction is conducted in a cylindrical percolator of 200 to 300 c. c. capacity, so as to enable thorough exhaustion of the drug. For the solvent, pure ether or a mixture of 75 to 80 per cent. ether and 25 to 20 per cent. chloroform, may be used. It generally suffices to macerate the drug five to ten minutes with the solvent, shaking the mixture occasionally before adding the alkali. In some cases it may be necessary to first remove the fatty matter from the drug by extracting the same in an exhaustion tube, or an ordinary funnel. In the latter case place a plug of cotton in the stem of the funnel, then pack in quite firmly the drug, and extract the fat by means of ether. Should the latter take up any alkaloid, as is frequently the case, the alkaloid must be recovered by washing out the fatty ether solution with acidulated water.

THE ALKALI.

For the alkali a ten per cent. ammonia solution is generally used. Immediately upon the addition of the alkali the mixture must be vigorously shaken so that the drug powder may be moistened uniformly. Continue the maceration for about half an hour during which shake the mixture occasionally. Now add a definite quantity of water which varies for different drugs and must be determined by experiment. After thoroughly shaking the mixture the drug mass will gather in lumps and thus permit the ether to be poured off as a clear solution.

RECOVERY OF THE ALKALOIDAL SOLUTION.

Occasionally it may be impossible to recover the full quantity of the ethereal

solvent prescribed on account of the drug not separating promptly, as with ipecacuanha, for instance. Yet the full quantity may be recovered if as much as possible of the separated solvent is first poured off, and the closed flask with its remaining contents be then gently shaken in a horizontal position and allowed to remain at rest for a short time. The drug mass will then usually collect in balls and enable the pouring off of the requisite quantity of the ethereal solvent.

In many cases it is advantageous to pour off into a flask a little more than the required quantity of the solvent, as for instance 83 gms. instead of 80 gms. or 104 gms. instead of 100 gms. The well stoppered flask may then be set aside for some time after which the requisite quantity, 80 or 100 gms. of the clear solution is poured into a separatory funnel.

The clearer and purer this first solution, the more readily will the liquids separate in the further operations. The ether solution may contain besides alkaloids, fat, wax, resins, coloring matter, odoriferous principles, etc., and must therefore be washed with acidulated water to extract the alkaloid. Usually a solution containing 0.5 to 1.0 per cent. hydrochloric acid is used for this purpose in quantities of 25, 15 and 10 c.c., hence a total of 50 c.c. for the three extractions. The alkaloids show a difference in behavior, some passing readily and others slowly into the acidulated solution. Three washings, however, suffice for the complete extraction. The acidulated aqueous solutions are again placed in a separatory funnel (heating or filtering is generally not necessary), made alkaline with ammonia and immediately treated with the successive portions of 3 parts by weight of chloroform and 2 parts of ether, or with pure ether. It is best to first add the ethereal solvent to the acid, alkaloidal solution, and then the ammonia. Use 100 gms. of the mixed solvent, or 75 gms. of ether.

THE NATURE OF THE SOLVENT.

If only ether is used as the solvent, two separatory funnels are required so as to permit the transfer of the aqueous solution from one to the other. As the liquids separate readily the operation does not take long.

The use of ether alone has advantage over the mixed solvent of chloroform and ether since the alkaloids extracted by the former are generally purer, more colorless, usually crystalline, and can be easily dried, whereas the tough residuum recovered on evaporation of the chloroform solutions is difficult to dry completely. Alkaloids, which in a crystalline state are insoluble or difficultly soluble in ether, may nevertheless be extracted by means of ether if there is sufficient of the solvent to act upon them in their nascent condition. In such cases there must be no delay in the extraction, or the alkaloid might separate from the solvent by crystallizing. The combined ethereal extracts are set aside for a short time, and then passed through a small filter moistened with ether and finally distilled.

THE DISTILLATION.

For the distillation tared Erlenmeyer flasks of 150 to 200 cc. capacity are used. The flasks are connected with a suitable condenser, and to avoid accidents it is advisable to first transfer to the tared flask only 30 to 40 c.c. of the solvent and distil it. The separated alkaloid facilitates the distillation of the remaining portions to be subsequently distilled. The residuum from the distillations is treated with two or three small portions of ether, and the latter removed by heating the flask on a water-bath. The vapors of ether are finally removed from the flask by means of a current of air from a bellows and the flask and contents heated on the water-bath for periods of 15 minutes each, and weighed in the intervals.

THE TITRATION.

For the titration the alkaloids are dissolved in 5 to 10 c.c. of neutral absolute alcohol, water added to the beginning of a turbidity, and the titration

performed with $\frac{N}{10}$ or $\frac{N}{20}$

hydrochloric acid solution, using hæmatoxylin for indicator. The above method of Keller possesses certain advantages over others heretofore known, inasmuch as it does not require any complicated apparatus, may be completed in the course of a few hours, and yields the alkaloids in an unusually pure condition. Aconitine, veratrine, atropine, strychnine, brucine, etc., are recovered colorless or pure white, and soluble in dilute acids, leaving but an insignificant residue. This result is attributed principally to not using alcohol in the preliminary extraction.

THE TEMPERATURE.

The alkali and acid is permitted to act upon the alkaloids only at the ordinary temperature and for so short a time that change in the alkaloids is not to be feared.

The above outlined method serves as the basis for all subsequent dissections in which the proportions of chemicals, etc., are more particularly given.

HYDRASTIS.

FORMULA A :

Hydrastis (60 to 80 powder).....	12.0 gm.
Ether.....	120.0 gm.
Ammonia.....	10.0 gm.
Water.....	15.0 gm.
Pour off.....	100.0 g.

FORMULA B :

Hydrastis (60 to 80 powder).....	25.0 gm.
Ether.....	125.0 gm.
Ammonia.....	10.0 g.
Water.....	30.0 g.
Pour off.....	100.0 gm.

Extract with hydrochloric acid and eventually with ether, or chloroform ether.

Of the three alkaloids, berberine, hydrastine and canadine, the hydrastine is considered as representing the medicinal value of the rhizome, and hence the reactions of the German Pharmacopoeia and the third edition of the Swiss Pharmacopoeia for rhizome. hydrastis and fluid extract of hydrastis, which depend upon the berberine, do not indicate the medicinal values of the drug, or its contents in hydrastine. If the assay is conducted according to

*Translated from the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD from the *Pharmaceutische Zeitung*.

formula A, the hydrastine is obtained from 10.0 gm. of the drug, if according to formula.

By formula B from 20 gm. of the drug, with chloroform ether solvent, the hydrastine is recovered as a yellow mass very difficult to dry, while from the ether solutions it separates in the form of yellowish white crystals. In spite of the yellow color the alkaloid contains but little berberine. Keller found the percentage of hydrastine to range from 2.63 to 2.97 per cent.

The alkaline reaction of hydrastine is so indefinite that it cannot be readily titrated. However, it may readily be obtained in well defined crystals by dissolving in 8 c.c. of warm alcohol, adding 4 c.c. of ether and gradually 20 c.c. of water and setting the mixture in a cool place to crystallize. After 24 hours the hydrastine will be found separated as slightly yellowish colored needles. The mother liquor is poured off through a filter and 6 c.c. of cold water used for washing and rinsing the flask and filter. After drying both at 100° C., remove the crystals to the flask and weigh.

(To be continued.)

Fruit Juices and Syrups.*

A typical formula for preparing a concentrated fruit syrup may be found in the Pharmacopœia, namely, syrup of raspberry, which is the process of the German Pharmacopœia, except that the latter directs 65 parts of sugar for every 35 parts of filtered juice. The temperature during fermentation prescribed by the U. S. P. should be maintained as nearly as possible. The French Codex directs fermentation to proceed at between 12° and 15° C. (54—59° F.) Other fruit syrups may be prepared according to the same method. It may be explained that the fermentation is for the purpose of precipitating the pectin present, which otherwise interferes with filtration. The addition of alcohol is for the purpose of hastening this process, and also to aid slightly in temporary preservation of the juice, to avoid acetic fermentation and fungoid growths. It is also believed that by this process of fermentation the aroma is more fully developed, especially in strawberry juice. Fermentations should proceed for about 24 to 36 hours.

It is important for the keeping quality of fruit juices that they be perfectly clear and bright, while in the case of the syrups, when boiled, all scum forming must carefully be removed by straining, having avoided all stirring while the liquid comes to a boil. Sometimes fermented fruit juices remain turbid and difficult to filter; to these a small quantity of *skimmed* milk may be added, which will be coagulated by the acids present, and thus act as a clarifier. Paper pulp will sometimes prove desirable for clarifying. Only the very best grade of sugar should be employed. The containers should be perfectly sterile and dry, the latter condition being insured by rinsing with alcohol.

When boiling hot syrup is poured into the bottles, the latter should stand on several thicknesses of cloth wet with cold water, to prevent cracking. Cork

immediately, tie over, dip into sealing-wax, and lay flat, and allow to cool off in that position; in fact they should remain thus until opened, to insure preservation.

The different formulas printed below have been collected from various sources. The "Appert" process there mentioned is nothing but what is now called sterilizing. The bottles are filled, allowing space for expansion of the contents when hot, the corks are inserted and securely fastened with twine. They are then placed into a vessel with cold water reaching up to their necks, standing on a false bottom or a layer of straw. The temperature of the water bath is gradually raised and finally the boiling point maintained for about 10 to 15 minutes. Removing from the bath, the tops are sealed over and the bottles allowed to cool in a reclining position. Some prefer to insert the corks only after sterilization is complete. This involves less danger as to explosions, but is rather less reliable.

SYRUP OF RASPBERRY.

Contuse the berries, place them in a vat, add 2 per cent. of sugar, and ferment the mass at a temperature of between 70° and 80° F. for three or four days until all pectin has separated and no more signs of fermentation are visible. Then express the juice, which, allow to settle in a cool place for two days, decant carefully from the pulverulent pectin, and filter. Preserve the juice by Appert's process, or convert into syrup by dissolving in 5 parts of the clarified juice, 9 parts sugar, and heating to the boiling point.

2. A better and safer way is to add at once to the freshly bruised fruit 5 to 6 per cent. of alcohol, and then proceed as in the foregoing. This formula would seem to deserve preference.

3. Crush the raspberries in a glass vessel with a wooden pestle to a pulp, add to it 5 to 10 per cent of cane or grape sugar, and allow the whole to stand, stirring occasionally. When the mass ferments the juice becomes clear, when it may be filtered and bottled, or converted into syrup.

4. Put 6 pounds of raspberries into a china bowl, with a quart of water in which has been dissolved 2½ ounces of citric acid, and let it remain twenty-four hours; then strain, taking care not to bruise the fruit. To each pint of clear liquid add 1½ pound of sugar, and stir until it is dissolved.

5. Proceed as in No. 1. When the fermentation is nearly ended (indicated by the appearance of a small yellow fly) express the juice, add to every pound of the latter 1 ounce of the deodorized alcohol, set aside for one night, and then filter. Bottle the juice or convert into syrup.

6. Macerate the berries interspersed with sugar, 1½ pounds of sugar to 1 pound of berries, for twenty-four hours in a cool cellar, and then drain off the juice. Preserve the syrup by means of Appert's process.

7. Add to the foregoing product some alcohol, or a little bisulphite of lime. The flavor is not supposed to be impaired by the latter.

8. Pure fruit juice, 16 fluid ounces; dilute acetic acid, 1 fluid ounce; water,

7 fluid ounces; granulated sugar, 3 pounds. Dissolve the sugar without heat. Preserve in air-tight vessels in a cool place. The acetic acid is objectionable.

SYRUP OF MULBERRY.

Mulberry juice, 1 pint imp.; sugar, 2 pounds; strong alcohol, 2½ fluid ounces. Heat the juice to the boiling point, and when it has cooled filter it. Dissolve the sugar in the filtered liquid with a gentle heat, and add the spirit.

SYRUP OF STRAWBERRY.

Put 2 parts of strawberries deprived of the calyx, without crushing them, into a large-mouthed jar; add to them 2½ parts of sugar, and frequently shake, keeping the vessel in a cool place. The sugar absorbs the juice, leaving the fruit shriveled and tasteless, the latter being removed by means of a strainer without pressure. Mix the clear syrup with 20 per cent. of alcohol.

SYRUP OF CHERRY.

Employ the black, sour variety. Crush the cherries, together with the stones, and follow the direction given in No. 2.

FRUIT SYRUP FOR LEMONADE.

Raspberries, 1,000 grams; blackberries, 500; bilberries, 500; lemon, 3 fruits. Mash in a stone mortar and add of cold water, 1,500 parts. Let stand for three days, or until fermentation has finished. Express and filter. In every 2,500 dissolve citric acid, 40; and sugar, 4,500. Boil up once in a copper kettle.

Soda-Water Syrups.

ROSE BUD.

(Bonham's Guide.)

Strawberry juice.....	8 oz.
Rose water.....	1½ oz.
Albumen foam.....	2 oz.
Cochineal coloring.....	20 gtt.
Syrup.....	1 gal.

PEACH BLOW.

(Bonham's Guide.)

Peach juice.....	8 oz.
Raspberry juice.....	2 oz.
Lemon juice.....	2 oz.
Compound spirit juniper.....	4 oz.
Albumen foam.....	1 oz.
Cochineal coloring.....	40 gtt.
Syrup.....	3 qt.

CALISAYA TONIC.

Brown calisaya.....	4 av. oz.
Gentian.....	1 av. oz.
Orange peel.....	1½ av. oz.
Cinnamon.....	1 av. oz.
Alcohol, 65 p. c., enough to make.....	32 fl. oz.

For use at the soda fountain mix one measure of this tincture with 2 measures of syrup.

EGG CREAM.

(Bonham's Guide.)

Cream.....	4 oz.
Egg yolk.....	4 no.
Extract vanilla.....	1 oz.
Syrup.....	12 oz.

Triturate together the yolks of egg with the cream, incorporate with the sugar, and lastly add the vanilla.

CARBONATED CREAM.

(Tufts's Book of Soda Syrups.)

Glycerin.....	¾ pd.
Powdered sugar.....	¾ pds.
Water.....	1 gal.
White of eggs.....	6 no.

Dissolve the sugar in the water, add the glycerin, beat the white of eggs to a froth and add to the foregoing. Then

* The Western Druggist.

pour into a fountain containing 5 gallons of water, and charge at 125 pounds pressure.

Draw the flavoring syrup and carbonated cream in one glass, and put shaved or cracked ice in another glass. On the ice draw the carbonated water, and mix with the contents of the first glass by pouring together. These directions must be closely followed.

EXTRACT OF NECTARINE.

(Harrop's Monograph.)

Oil bitter almonds.....	45 gtt.
Oil rose.....	8 gtt.
Oil neroli.....	8 gtt.
Oil orange.....	6 fl. dr.
Oil lemon.....	6 fl. dr.
Tincture fresh lemon peel.....	1 fl. oz.
Tincture fresh orange peel.....	1 fl. oz.
Alcohol.....	40 fl. oz.

Color light red with cochineal.

IRON, MALT, AND PHOSPHATE.

(Harrop's Monograph.)

Iron pyrophosphate.....	15 gr.
Extract malt.....	1 fl. oz.
Solution acid phosphates.....	1 fl. oz.
Solution albumen.....	2 fl. oz.
Solution caramel.....	2 fl. dr.
Extract vanilla.....	1 fl. dr.
Extract bitter almonds.....	30 m.
Syrup, enough to make.....	20 fl. oz.

MOXIE EXTRACT.

(Bonham's Guide.)

Angostura bitters.....	12 dr.
Tincture ayena sativa.....	9 dr.
Tincture cinchona compound.....	6 dr.
Tincture nux vomica.....	3 dr.
Fld. ext. coca.....	3 dr.
Oil wintergreen.....	22 gtt.
Oil sassafras.....	22 gtt.
Caramel coloring.....	8 oz.

Moxie syrup is prepared by mixing 12 ounces of the foregoing extract with 2 ounces of foam extract and 1 gallon of syrup.

ALBUMEN FOAM.

White of egg.....	1 no.
Water.....	8 oz.
Syrup.....	8 oz.

After stirring well together strain through muslin or cotton.

Kola Redivivus.

Dr. Edward Heckel, of the Marseilles School of Medicine, has published an elaborate monograph on "The African Kolas." A French reviewer is quoted in *The Provincial Medical Journal* as declaring it to be the sole didactic treatise in existence on the subject; and we are further assured that it presents a complete account of ten years' uninterrupted study of a product hitherto unknown, but which, thanks to the initiative of the author, has now taken up a definite position not only in the medicinal arsenal, but also amongst the devotees of the various sporting recreations that of late years have happily become so fashionable.

Dr. Heckel constitutes himself, so to speak, the Parmentier of Kola, and confidently maintains that the more the drug is subjected to investigation, the more triumphant will be its emergence from the ordeal. He is satisfied that the substance to which he has devoted so much attention is not one of those brilliant meteors that periodically shot across the pharmaceutical sky, only to disappear for ever as rapidly as they came.

Dr. Heckel's work may be described as a codification of the uses and mode of employment of kola; an endeavor to deliver a valuable medicament from the hands of empiricism. Everything that touches on its history is treated of with the utmost minuteness, no important point is omitted, and as the writer gradually develops his subject, in five compendious, yet exhaustive chapters, the reader instinctively feels that little or nothing is left for future commentators. It may be said in fact that the whole past, present, and future of kola is laid bare. The author's practical deductions are based on his own rigorously conducted experiments, and will be found of great interest to the physician, to whom the portions of the book which deal with physiology and therapeutics should be especially valuable.

In this connection it may be mentioned parenthetically, that Dr. Heckel is careful to accord due credit to the medical school of Lyons for having been the first to employ kola in the treatment of diabetes; a new departure in therapeutics, which was attended by what have been described as marvelous results.

The naturalist who reads this book will find therein the description, habitat, diagnosis, and chemical analysis of all African plants yielding true kola (*Sterculia acuminata*) or false kola. The pharmacist, to whom this substance can no longer now remain unknown, may read the entire work with the utmost advantage, but the information that is indispensable for his purpose will be found chiefly in the chapters devoted to materia medica and pharmacology. In future it will be impossible for him to confound the *Sterculia acuminata* with the inert produce of neighboring species which too often are found mixed with the genuine article in the commercial packages coming from Africa; a circumstance which has largely tended to bring the drug into disrepute. The zealous apothecary, moreover, will in future be able to distinguish between the three varieties of the true kola, the red, the white, and the rose; and to tell to which of these he should have recourse in order to impart the highest efficacy possible to his preparations, now that kola is recognized as the most precious tonic hitherto discovered for the treatment of diseases affecting the heart, the bowels or the nervous system.

Nothing has been omitted from this book. The merchant will find therein an exact description of the districts where the best kinds of kola are produced, the annual out-put, the statistics of evaporation, and the ruling prices. He will also be interested in learning where, besides in France, there is a market for the mature article. The agricultural colonist will see how the plant is propagated, what conditions it thrives best under as regards site, soil, and aspect, what climate suits it best, etc. He will note with astonishment that most excellent results have already followed the cultivation of kola in some of the tropical colonies belonging to France, and it is to be hoped that the spirit of healthy emulation may thereby be aroused in his bosom.

While treating of the native methods

of employing kola, the virtues ascribed by them to the plant and its products, and the symbols they use with reference thereto, the author incidentally touches on many things concerning the negro populations of equatorial and tropical Africa that are of the highest interest to an ethnologist. He also devotes a chapter to the enormous value of the drug as a maintainer of health and strength in troops on active service. Apparently the kola plant is very prolific, yielding when well cultivated a hundredfold return; and we are now informed that in addition to its well-known therapeutic qualities the nut possesses an alimentary value second only to that of the renowned *cacao theobroma*.

Note on Liquid Apiol.

By LEWIS OUGH, F.C.S.

The use of liquid apiol in capsule and perle form having considerably revived during the last few years, and being called upon to prepare rather large quantities, it has occurred to the writer that a few notes with reference to this substance may be of interest. The information contained in the literature on the subject is somewhat vague and misleading. Squire describes apiol as "a greenish-brown oily liquid obtained from the fruit of *Apium Petroselinum*, with a peculiar odor and disagreeable taste," and then proceeds to say that "from the published papers of MM. Joret and Homelle, who introduced this medicine in 1850-55, it would appear that originally the non-volatile oil alone was used, to which the name apiol was alone applied; but from an examination of capsules obtained from them in 1889 we find that the volatile oil is now employed, 95 per cent. being carried over by distillation with water."

The National Dispensatory describes parsley-fruit as containing $\frac{1}{4}$ per cent. of volatile oil and 22 per cent. of fixed oil, and describes an oil of parsley as colorless or yellowish, of s.g. 1.01 to 1.14. The stearepten or camphor contained in this oil has also been named apiol, and may be obtained in white needles, insoluble in water, but readily dissolved with alcohol and ether.

The preparation of (liquid) apiol is then given. Exhaust the fruit with petroleum benzine, evaporate the solvent, heat the residue with strong alcohol, which on evaporation leaves the apiol as a colorless oil, s.g. 1.07, having an acid reaction, pungent taste, and odor of parsley. Other authorities describe liquid apiol as being simply an alcoholic extract of parsley seeds, and from experiments recently made it has been ascertained that an alcoholic extract is identical with the apiol now in the market, and is such as described by Martindale as a green oily liquid with a pungent parsley-like taste, not miscible with water, but readily soluble in alcohol and ether.

The following method gives a good result when dealing with $\frac{1}{2}$ to 1 cwt. of seeds.

The freshly-powdered seeds are thor-

oughly damped with alcohol (s.g. .838), packed in a percolator, and after standing forty-eight hours percolation is continued with alcohol, $\frac{1}{2}$ gallon being used to every pound of seeds taken. The bulk of alcohol is recovered from the bright green alcoholic liquor by distillation and the remainder driven off in an open vessel by means of a water-bath. The residue on cooling deposits a quantity of a waxy-looking solid from which the apiol is readily separated as a dark green oily-looking liquid with a specific gravity of 1.036; the yield being about 7.5 per cent.

The experiments made were conducted in the laboratory of John Richardson & Co., Leicester (Limited), whose courtesy in allowing these notes to be published the writer wishes to acknowledge.—*The Chemist and Druggist*.

Why Not Turn Your Knowledge to Account.*

BY FRANK EDEL.

Des Moines, Iowa.

The pharmacist often is called upon to dispense odd chemicals, and if he were to keep anything like the assortment in stock that he may have calls for occasionally, he would soon find his shelves stored with goods in some instances likely to spoil and in others to be unsalable. It is astonishing how often pharmacists let customers go without once remembering that on their shelves are all the chemicals necessary to produce easily and simply the required article. And if a given substance is wanted in the form of solutions, its preparation often would require but a minute.

The pharmacist, by so doing, can easily make a reputation for himself in the manufacture of these goods, and one can often hear people say, "We will go to So-and-So's pharmacy, for if he hasn't got it in stock he will make it for us." It is astonishing how soon such things become known, and when known, what a powerful influence they are towards building up a tradesman's business.

The writer calls to mind an instance of a physician who, after going the rounds of the stores, inquiring for subiodide of bismuth, came to the establishment where he (the writer) was employed, and inquired for the article. He was told that it was not in stock, but could be made for him within a certain time. At another time he wanted iodide of lime, and then saccharated iodide of iron, and thus became a regular customer. Another time a certain photographer came in and asked for chloride of lead and sulphate of lead. He was told that they were not in stock, but would be made for him. This gentleman afterwards took particular pains to send people to the store.

Elsewhere, in an article on the remedy for the specialty nuisance, the writer has said that there is no place where a pharmacist can so easily make a reputation for himself, no place where he can occupy his spare time to so much advantage, as in laboratory work. And this work can be done without neglecting the mercantile part of his business. It is not the purpose of this article to advocate the making of chemicals in the drug store, for the reason that in most cases they can be purchased from reputable manufacturers for

as little money as they can be made for by the pharmacist. And, therefore, there is no argument in favor of making them on the ground of economy.

But with odd chemicals it is different. The pharmacist cannot afford to buy them, for the sale would not justify, and in most instances they can be prepared from those chemicals carried in stock, and many of them can easily be made. Take, for instance, the lithium salts. Having the carbonate lithium in stock, the pharmacist is able to supply the citrate, salicylate, benzoate, borate, etc., if in solution, in a few minutes. And he can, also, easily prepare the salts themselves when so desired. The same is true of the ammonium salts, also of those potassium and sodium.

Some years ago, while employed in a pharmacy where many prescriptions calling for solution of benzoate of ammonium, 10 grains to each dram, were filled, the writer had his attention called to the insolubility of the preparation as sold in the market. This is entirely due to the salt being of acid reaction instead of alkaline, as directed in the Pharmacopoeia. Of course, solution could be effected by heat, but it would crystallize out when cold. This difficulty was remedied by adding ammonia in slight excess. In order to overcome the trouble, a permanent stock-solution was made up, containing 10 grains to the dram. This solution was made by taking the proper amount of benzoic acid and water, applying heat, and adding ammonia to slight excess, filtering, and adding water to make the proper volume. Thus we were able to dispense these prescriptions rapidly and properly. It is an old practice, and a good one, to keep a 50-per cent solution of acetate of potassium on hand for dispensing. Such a solution keeps well, and is easily made.

It is astonishing what a number of chemicals the pharmacist can prepare himself, with comparative ease, if he will consult his reference works. Such work makes him a better pharmacist, gives him a more accurate and practical knowledge of chemical process and the chemistry of what chemicals he handles. In fact, there is no line of work so conducive to the actual thoroughness of the pharmacist as this. It enables him better to understand the action of one chemical upon another, and to forecast results of combinations ordered in prescriptions, and often to save physicians from serious error. Again, it gives a clear and more practical insight into the arithmetic of chemistry, and in every way conduces to the benefit of the pharmacist. And the good which comes from that line of work is the advantage it is to the apprentice. He thus becomes familiar with the working-methods, and it is of great advantage to him. Seeing practical demonstrations of what pharmacy should be, he is better able to appreciate the teachings of the schools.

Superfatted Soap.*

BY J. R. JOHNSON, PH.C.,

Dispenser to the Royal Infirmary, Liverpool.

Professor Unna recommends, as being more easily absorbed than the ordinary pharmacopoeial liniment of iodide of potassium with soap, a liniment made from a 5 per cent. superfatted soap, prepared with benzoated lard and potash.

The formula, as supplied to me, was :

5 per cent. superfatted soap, made from
benzoated lard and potash.....9 parts.
Iodide of potassium (in a little [?] water) 1 part.

On attempting to prepare the above, much difficulty was experienced in making, in the first place, a perfectly neutral soap. In the absence of any information that would guide me as to the relative proportions of lard and caustic potash that would be required, it was necessary to start *ab initio*. The ordinary test for alkalinity and acidity, litmus, phenol-phthalein, etc., are useless in dealing with soaps, and the test usually, I believe, employed and recommended, viz., the degree of acidity imparted to the tongue, is found to be most fallacious and misleading. At any rate, so far as a soap made with lard and caustic potash is concerned, it is quite impossible to arrive at neutrality by relying upon the tongue.

Casting round for a means of determining exact neutrality, I employed calomel as a test, with the greatest success. The slightest excess of potash in the soap at once reduces the mercurous salt. The method adopted was to heat together over a steam-bath for forty-eight hours weighed quantities of benzoated lard and caustic potash, adding 50 parts of water for every 100 parts of lard employed. The ingredients were frequently well stirred, and at the end of that time a small portion of the soap was rubbed upon a porcelain tile with a few grains of calomel. If excess of alkali had been used, the calomel was at once blackened. The test held readily to the tenth of a grain of the alkali when working with over 300 grains of the soap. With the samples of benzoated lard and caustic potash at my disposal, actual neutrality was obtained with the following proportions:

Benzoated lard.....100 parts.
Caustic potash.....27.3 "

Having thus prepared a neutral soap, it was an easy matter to put in an additional 5 per cent. of lard; thus the figures for exact neutrality were, percentage:

Benzoated lard.....78.56
Caustic potash.....21.44

with added 5 per cent. lard:

Benzoated lard.....79.56
Caustic potash.....20.44

or for a convenient quantity:

Benzoated lard.....1 lb.
Caustic potash.....4 ozs. 56 grains.

In dealing with such a quantity, the potash is best previously dissolved in 4 ounces of water, and the benzoated lard and solution of potash kept well stirred together over a water-bath for three or four days, to insure perfect combination. The resulting soap is fairly firm, somewhat resembling "crème d'amande" in consistency and appearance, but rather firmer.

To prepare liniment of iodide of potassium with this superfatted soap, the following formula will be found to yield an excellent result:

Of 5 per cent. superfatted soap as above prepared.....1 oz.
Iodide of potassium.....3 iss.
Distilled water.....f3 vi.

*The Western Druggist.

*The Pharmaceutical Journal and Transactions.

Dissolve the salt in the distilled water; warm the soap with half of the solution in a porcelain dish over a steam or water-bath, gradually add the rest of the solution, and beat together with a spatula until cold. The product is a smooth and white, creamy liniment, rubbing into the skin in a manner far preferable to the present uncertain pharmacopoeial preparation. It is important, in making the liniment, to follow the above directions closely, as any other method ends in failure, so far as the elegance of the liniment is concerned.

The strength of the liniment in the above formula is that suggested by Professor Unna, but, of course, a liniment of any required strength is, as easily prepared, and oil of lemon or any other essential oil may be added if desired.

With regard to the calomel test for neutrality, I have had neither time nor occasion to extend its application to other soaps, but it is possible that it may be as useful in other combinations as in the case of lard and caustic potash.

Fluid Extracts.

By FRANK T. GREEN,*
San Francisco, Cal.

There is no class of preparations so easy to make and yet so seldom prepared by retail druggists in a full line. The oldest men in the business well remember when fluid extracts on their shelves were a rarity. Now we find such preparations of almost every organic drug in the materia medica. The principal objection to the practice of making fluid extract lies in the process of distillation and correcting the gravity of the alcohol recovered.

With but little practice, the druggist will find that they are not objections at all. For example, take a fluid extract that was on the want list last week, one pound red extract broom tops (*scoparius*). A pound of the ground drug was purchased in this city at a cost of 30 cents. Alcohol now costs 30 cents a pint. The U. S. P. says to use dilute alcohol; therefore the amount of alcohol actually used is 8 ounces at 15 cents. It is well known that the operator is very liable to lose alcohol in percolating and distilling. Granted: we will allow a ten per cent. loss, which is a fair allowance, or even 7 cents for each pound made, which is ample to cover careless work.

The cost, summarized in three instances, would be as follows:

1 pound ground <i>scoparius</i>	30c.
$\frac{1}{4}$ " alcohol.....	15c.
Additional loss for alcohol.....	45c.
	7c.
	59c.

The extracts cost in the market 75 cents.

Then take fluid extract dandelion root:

1 pound ground dandelion root.....	35c.
Alcohol.....	15c.
Loss for alcohol.....	30c.
	7c.
	57c.

The extract costs in the market 95 cents.

Then take fluid extract *ura ursi* leaves:

1 pound ground <i>ura ursi</i>	25c.
Alcohol.....	15c.
Loss for alcohol.....	40c.
	7c.
	47c.

The extract costs in the market 75 cents.

*The Pacific Druggist

From the above figures the reader can see that there is a saving of from 25 to 30 per cent., at least, in favor of his manufacturing his own fluid extracts.

The important factors, heat and time, besides cost of bottles and labels, have been omitted. I speak of this in justice to the manufacturers, who do not charge exorbitant prices for their preparations, but they do charge for time, plant, containers and skill in preparing them. I am also well aware of the fact that if one entered the market to gain profit from the manufacture of these things, they would find that it is not a bed of roses for the wholesale manufacturing pharmacist. But I do say that the time spent in preparing fluid extracts by the retail pharmacist is time yielding a cash value.

The satisfaction, experience and knowledge gained by the operator is not mentioned in the last sentence, but should be considered. It also gives the firm a standing in the eyes of its employees, its customers and its physicians.

The expense of the plant would be—irrespective of percolators:

1 still.....	\$12.00
1 iron evaporating dish, porcelain lined.....	.75
1 gas or coal-oil stove.....	1.50
1 alcoholometer and cylinder.....	2.00
Total.....	\$16.25

The process of the manufacture of this class of preparations, although well known, may be briefly stated as follows:

The powdered or ground drug is weighed, moistened, allowed to stand, packed in percolator, treated by the proper menstruum. Reserve the first 90 per cent. of the percolate; mark "Percolate No. 1." Exhaust the drug with some menstruum. Drive out all menstruum from drug with water by displacement, and place this second percolate in still, distilling off all or nearly all of your alcohol. The liquid in the retort represents 10 per cent. of the drug used. Transfer to an evaporating dish on a water bath or evaporator, and continue until the proper point is reached. For example, if you want to evaporate to two ounces, put two ounces of the water in the evaporating dish, measure its depth with a small stick, cutting a notch at the proper height. Throw out the water and put your second evaporated percolate from the still in evaporating dish, and evaporate until the same height is reached; then you will of course have two ounces remaining. Add this evaporated extract (representing 10 per cent. of the drug) to the first percolate (representing 90 per cent.) mix well, allow to stand awhile, and either filter or strain. If your drug was of the proper fineness, has been exhausted, your still does not leak, have not spilled things or burned your extract, you will be surprised to see what a fine product you will have. It will equal any on the market.

If you buy poor drugs to work with, it is either your fault or the seller's, and in either case can be remedied. I have the authority of those prominent in this branch in the United States for the statement that the retailer can make just as good products as the wholesaler, if he shows the needed care and takes a pride in his work. This

method of distillation of the surplus alcohol will not be applicable for such drugs as *sarin*, *cubeb* and others having volatile constituents of value. Either re-percolation or pressure is imperative for these.

Now what to do with the hydrated alcohol coming from the still. That from poisonous drugs, together with those having odorous principles, can only be used for liniments. The others can be turned into dilute alcohol by the simple rule as laid down in the U. S. P. on page 30.

The Treatment of Tapeworm in Children.

In the *Journal des praticiens* for May 26, Dr. Descroizilles relates the case of a girl, twelve years old, who had tapeworm. She complained of pains in the head, and her appetite was capricious. Diarrhoea and constipation alternated, and traces of tapeworm were seen in the stools. The author prescribed eight grains of calomel, and three days later the same quantity of *santonica*. This was followed by the expulsion of fragments of the tapeworm, thus confirming the diagnosis. Dr. Descroizilles hesitated to interfere directly by a radical treatment, but owing to the persistence of the parents determined, meanwhile, on an immediate intervention, and the following method was employed: 1. For two or three days a special diet, such as fish or vegetable soup, eggs, milk, and a moderate quantity of bread. 2. During the last twenty-four hours nothing but milk. 3. On the day before the attempt at expulsion, toward evening, a laxative enema to be given. A second enema also to be given three hours before the administration of the following remedy: 4. Ethereal extract of male fern, two drachms; calomel, seven grains; peppermint water, two drachms and a half; gum arabic, seventy-five grains; syrup, five drachms; distilled water, a sufficient quantity to make a mixture of two ounces. A tablespoonful to be taken every ten minutes. 5. Several hours later an enema of castor oil, of from six to seven drachms, to be given.

Dr. Descroizilles prefers the ethereal oil of male fern to quince seeds, kousso, promegranate, and other preparations of male fern. He prefers it also to pelletierine, the action of which is less regular. It is the best remedy for children if it is given in capsules or in gelatin and sugar.

The author is disposed to try a formula given by M. Duhourcau, who combined green ethereal extract of male fern, chloroform, castor oil, and croton oil. The chloroform renders the worm torpid, the extract of male fern is a ténicide, and the castor oil acts as a purgative. The author thinks it is an ingenious combination which responds to the various indications in the rational treatment of tapeworm.

PORTES' ANTISEPTIC LOTION.

	Parts by weight.
Borax.....	10
Boric acid.....	5
Thymol water.....	1000

Hashish and its Effects—With Some Curious Experiences.*

By C. J. S. THOMPSON.

Hashish, or ganja, is the native term applied to the dried flowering tops of the *Cannabis indica*, from which the resin has not been removed.

This plant, cultivated largely in India, is now considered to be the same, botanically, as the *Cannabis sativa* of European cultivation; but there is great difference in their medicinal activity, that growing in India being much more powerful. Ganja is the native name for part of the plant, Sidhi for another part, which is much poorer in resin. The resinous principle is called "churrus," and the entire plant, cut during inflorescence, dried in the sun, and pressed into bundles is called bhang. The method of using it in India is chiefly for smoking in combination with tobacco. For this purpose, a plug of tobacco is first placed at the bottom of the bowl of the pipe, on the top a small piece of hashish, and over this a piece of glowing charcoal. Another way is to knead the drug with the tobacco by the thumb of one hand working in the palm of the other, till thoroughly incorporated. Simple infusion of the leaves and flowering tops are also much used for drinking purposes by old and young in India, the alcoholic form being a most active and dangerous intoxicant.

HISTORY OF THE DRUG.

The antiquity of the drug is great, and it is said to have been used in China as early as the year 220, to produce insensibility when performing operations. The Persians employed it in the middle ages for the purpose of exciting the pugnacity and fanaticism of the soldiers during the wars of the crusades.

As far back as 1803 Vissey, a French scientist, published a memoir of hashish, and attempted to prove that it was the Nephenthe of Homer; there is little doubt, however, that the use of the drug was known to Galen.

Silvestin de Lacy further states that the word assassin is derived from the word hashichin, which was given to the Ishmaelites who committed murder under its influence.

The Chinese herbal, Rh-ya, written about the fifth century, B.C., notices the fact that the hemp plant is of two kinds, the one producing seeds and the other flowers only. Herodotus states that hemp grows in Scythia, both wild and cultivated, and that the Thracians made garments from it which can hardly be distinguished from linen. He also describes "how the Scythians expose themselves as in a bath," to the vapor of the seeds thrown on hot coals.

DESCRIPTION OF THE DRUG.

The hemp occurs in two principal forms, viz: 1. Bhang, which consists of the dried leaves and small stalks, which are of a dark green color, mixed with a few fruits. It has a peculiar odor, but little taste. Mixed with flour or incorporated with sweetmeat it is also called hashish. It is also smoked or taken infused in cold water.

2. Ganja consists of the flowering shoots of the female plant, having a compound or glutinous appearance, and brownish-green in color. Of the many curious experiences that have been written describing the effect of hashish, perhaps the best is that given by Gautier, in which he relates his own experience of the drug.

THE HALLUCINATIONS.

"The Orientalists," says he, "have in consequence of the interdiction of wine, sought that species of excitement which the Western nations derive from alcoholic drinks." He then proceeds to state how a few minutes after swallowing some of the preparation a sudden overwhelming sensation took possession of him. It appeared to him that his body was dissolved, and that he had become transparent. He clearly saw in his stomach the hashish he had swallowed, under the form of an emerald, from which a thousand little sparks issued. His eyelashes were lengthened out indefinitely, and rolled like threads of gold around ivory balls, which turned with inconceivable rapidity. Around him were sparklings of precious stones of all colors, changes eternally produced, like the play of a kaleidoscope. He every now and then saw his friends, who were around him, disfigured as half men, half plants—some having the wings of the ostrich, which they were constantly shaking. So strange were these that he burst into fits of laughter, and, to join in the apparent ridiculousness of the affair, he began by throwing the cushions in the air, catching and turning them with the rapidity of an Indian juggler. One gentleman spoke to him in Italian, which the hashish transposed into Spanish. After a few minutes he recovered his habitual calmness, without any bad effect, and only with feelings of astonishment at what had passed.

THE NOISE OF COLORS.

Half-an-hour had scarcely elapsed before he again fell under the influence of the drug. On this occasion the vision was more complicated and extraordinary. In the air there were millions of butterflies, confusedly luminous, shaking their wings like fans. Gigantic flowers, with chalices of crystal: large peonies upon beds of gold and silver, rose and surrounded him with the crackling sound that accompanies the explosion in the air of fireworks. His hearing acquired new power; it was enormously developed. He heard the noise of colors. Green, red, blue, yellow sounds reached him in waves—a glass thrown down, the creaking of a sofa, a word pronounced low, vibrated and rolled within him like peals of thunder. His own voice sounded so loud that he feared to speak, lest he should knock down the wall or explode like a rocket. More than 500 clocks struck the hour with fleeting silvery voice, and every object touched gave a note like the harmonica or the Æolian harp. He swam in an ocean of sound, where floated like aisles of light some of the airs of "Lucia di Lammermoor" and the "Barber of Seville." Never did similar bliss overwhelm him with its waves; he was lost in a wilderness of sweets; he was not himself; he was relieved from consciousness, that feeling which always pervades the mind; and for the first time he comprehended what might be the state of elementary beings, of angels, of souls separated from the body. All his system seemed infected with the fantastic coloring in which he was plunged. Sounds, perfume, light, reached him only by minute rays, in the midst of which he heard mystic currents whistling along. According to his calculation, this state lasted about 300 years, for the sensations were so numerous and so hurried one upon the other that a real appreciation of time was impossible. The paroxysm over, he was aware that it had only lasted a quarter

of an hour. Another interesting account of the strange hallucinations produced by the drug is related by Dr. Moreau, who with two friends experimented with hashish. "At first," he states, "I thought my companions were less influenced by the drug than myself. Then, as the effect increased, I fancied that the person who had brought me the dose had given me some of more active quality. This, I thought to myself was an imprudence, and the involuntary idea presented itself that I might be poisoned. The idea became fixed; I called out loudly to Dr. Roche, 'You are an assassin; you have poisoned me!' This was received with shouts of laughter, and my lamentations excited mirth. I struggled for some time against the thought, but the greater the effort the more completely did it overcome me, till at last it took full possession of my mind. The extravagant conviction now came uppermost that I was dead and upon the point of being buried; my soul had left my body. In a few minutes I had gone through all the stages of delirium."

THE HALLUCINATIONS EVANESCENT.

These fixed ideas and erroneous convictions are apt to be produced, but they only last a few seconds, unless there is any actual physical disorder. "The Orientalist, when he indulges in it, retires into the depth of his harem; no one is then admitted who cannot contribute to his enjoyment. He surrounds himself with his dancing girls, who perform their graceful evolutions before him to the sound of music; gradually a new condition of the brain allows a series of illusions, arising from the external senses, to present themselves. The mind becomes overpowered by the brilliancy of gorgeous visions; discrimination, comparison, reason yield up their throne to dreams and phantoms which exhilarate and delight.

"The mind tries to understand what is the cause of the new delight, but it is in vain. It seems to know there is no reality." Hardly two people experienced the same effects from hashish. Upon some it has little action, while upon others, especially women, it exerts extraordinary power. While one person says he imagined his body endowed with such elasticity that he fancied he could enter into a bottle and remain there at his ease, another fancied he had become the piston of a steam engine; under the influence of the drug the ear lends itself more to the illusion than any other sense. Its first effect is one of intense exhilaration, almost amounting to delirium; power of thought is soon lost, and the victim laughs, cries and sings or dances, all the time imagining he is acting rationally.

THE SECOND STAGE.

The second stage is one of dreamy enjoyment followed by a dead stupor. Of the ordinary physical effects of hashish the first is a feeling of slight compression of the temporal bones and upper parts of the head. The respiration is gentle, the pulse is increased, and a gentle heat is felt all over the surface of the body. There is a sense of weight about the fore part of the arms, and an occasional slight involuntary motion, as if to seek relief from it. There is a feeling of discomfort about the extremities, creating a feeling of uneasiness, and if the dose has been too large the usual symptoms of poisoning by Indian hemp show themselves. Flushes of heat seem to ascend to the head, even to the brain, which creates considerable alarm. Singing in the ears is complained of; then comes on a state of anxiety,

* The British and Colonial Druggist.

almost of anguish, with a sense of constriction about the chest. The individual fancies he hears the beating of his heart with unaccustomed loudness; but throughout the whole period it is the nervous system that is affected, and in this way the drug differs materially from opium, whose action on the muscular and digestive systems is most marked.

It is somewhat remarkable that Indian hemp fails to produce the same intoxicating effects in this country that it does in warmer climates, and whether this is due to the loss of some volatile principle or difference in temperature it is not yet determined. But would-be experimentalists in the effect of hashish would do well to remember that it may not be indulged in with impunity, and most authorities agree that the brain becomes eventually disordered with frequent indulgence in the drug, even in India. It further becomes weakened and incapable of separating the true from the false; frequent intoxication leads to a condition of delirium, and usually of a dangerous nature; the moral nature becomes numbed, and the victim at last becomes unfit to pursue his ordinary avocation. It is stated by those who have had considerable experience in its use, that even during the dream of joy; there is a consciousness that all is illusion there is at no period a belief that anything that dances before the senses or plays upon the imagination is real, and that when the mind recovers its equilibrium it knows that all is but an illusion.

What is a Fatal Dose of Potassium Cyanide?

Dr. C. E. Bennett, in a letter to the *Medical Record*, suggested by the killing of a vicious elephant in this city with potassium cyanide, asks how much is a fatal dose of that substance for man. He believes that 2 grains may be regarded as about the extent of tolerance, but this answer is not shown to be based on any report of cases in which that amount was taken without fatal effect. On the contrary, he says: "I am reminded of the case of a young lady who took 2 grains and died in 12 minutes; also of a man to whom $4\frac{1}{2}$ grains proved fatal in less than thirty minutes." The author further quotes a case of supposed unusual tolerance which has been reported in a previous issue of the *Record*, of which he says: "Mr. X—, a druggist, was found in his room in an unconscious state, with livid countenance, dilated pupils, stertorous respiration, etc. Physicians were called, who, having no clew as to what he had taken, suggested no antidote, but, recognizing the indication for rousing the nerve-centers, administered ammonia, ether, and other stimulants freely, hypodermically and otherwise. His former medical attendant was wired, but did not arrive till the patient was so far recovered as to be able to give an account of himself. He said he dropped the poison into a glass, threw in a couple of ounces of whiskey, and drank it off. Selecting a piece from his can, he showed it to the doctor as what he thought was about the quantity he put into the glass. This piece was larger than a Lima bean, and weighed $19\frac{1}{2}$ grains; hence, it was believed he swallowed at least 15 grains; this, too, when his stomach contained little, if any, ingesta. But this is scarcely probable, since the report is so indefinite throughout as to greatly impair its value. It cannot be supposed that the patient, in his then half dazed condition, was very exact in his

estimate. Then we know that the cyanide is very sparingly or slowly soluble in ordinary whiskey. And if he drank it down immediately, as we are left to infer, much of the poison may have remained in the glass undissolved. We are not informed that an examination was made to see if any residue remained in the glass, or had been thrown out upon the floor of his room. I have quoted at considerable length from the report because the case was a remarkable one, if the guessing on the part of the patient and the doctor were even approximately correct. It was a heroic dose, to say the least. But such reports, to be of scientific or practical value, should be characterized by precision and exactness of detail.

An Effervescent Purgative Lemonade.

—The *Journal des Praticiens* for May 80 publishes the following formula, by Dr. Constantin Paul, who recommends it on account of its rapid action (in two or three hours) and its being tolerated: Sodium phosphate, three hundred and seventy-five grains; distilled water, eight ounces; syrup, an ounce; tincture of lemon, twenty-five drops; citric acid and sodium bicarbonate, each, half a drachm.

New Antidote for Prussic Acid.—A Hungarian chemist, Dr. Johann Antal, has reported to the Hungarian Society of Physicians that he has discovered a new chemical compound—nitrate of cobalt—which he says is a most efficacious antidote to poisoning by cyanide of potassium or prussic acid. He tried the antidote first on animals, and afterward on forty living persons who had been accidentally poisoned with prussic acid. In not a single case, he says, did the antidote fail.

The Treatment of Hiccough with Snuff.—In the *Journal des Praticiens* for May 5 (*Lyon Medical* for May 20) M. Tatevosow relates a case in which he successfully combated diaphragmatic spasm accompanied by cough or prolonged paroxysms by making the patient take snuff until sneezing set in. Its action was immediate, the paroxysm ceased, and the continued use of the snuff caused the disease to disappear. This, it is remarked, is an extenuating circumstance in favor of snuff that the societies against the abuse of tobacco might take into account in their proceedings.

Preservation of Wood.—A new process for the preservation of wood, says *Le Genie Civil*, has recently been made known by Dr. Zironi, of Zurich. It consists in heating the wood, say by means of a worm, in a closed vessel in which a vacuum is created. The heating is done in a vacuum in order to extract the sap that fills the pores of the wood. After this has been effected, a solution of resin in a hydrocarburet is introduced into the vessel. After the wood has become saturated, the liquid is drawn off, and a jet of steam is introduced. This removes the solvent, while the resin remains in the pores of the wood, which, through this process undergoes a great increase in weight.

Factitious Rum.—The ingenuity displayed by certain manufacturers in the production of factitious substances designed for the human stomach is well illustrated in the case of rum, which is, or should be, at least, the product of the distillation of sugar cane molasses after fermentation. Good rum, however, is rarely sold without being diluted with water and alcohol the latter often of poor quality.

According to the *Revue Mensuel* of the Ecole de Physique et de Chimie, the flavor indicated by the label on the bottle is given by means of formic, butyric and acetic ethers. In many cases the liquor is composed entirely of water and pure spirits, with the addition of prunes, cloves and tar, substances capable of giving a color pleasing to the eye, and, finally, of raspings of tanned leather, which communicate an aroma that is particularly relished by the consumer. Infusions of raisins, carob, oak bark, catechu and caramel may serve the same purpose. Things are so managed that the final degree of the liquor shall be 50.

New Form of Gold.—A curious colloidal form of gold, soluble in water containing basic acetate of cerium, is described by Herr Schöttlander. The solution is of a very intense reddish-violet color, turning to carmine red in dilute solutions. The color still remains distinct in a solution containing only traces of gold. These solutions are obtained by precipitating a dilute solution of a salt of cerium mixed with gold, by means of a lye of potash or soda. The green precipitate obtained is then dissolved in warm dilute acetic acid. The acetate of soda then gives a violet-red precipitate containing all the gold in the liquor and a little basic acetate of cerium. On drying this precipitate an amorphous bronze-colored mass, soluble in water, is finally obtained.

Pure Potassium Iodate for Analytical Purposes.—Groeger (*Apotheke Zeitung*) gives the following method of preparing pure potassium iodate for use as a reagent. Dissolve 40 gm. potassium permanganate, c. p., in 1 litre of hot distilled water, and add 20 gm. potassium iodide previously dissolved in a small quantity of water. Put into the water-bath and heat for twenty minutes. Add alcohol little by little until the permanganate is decolorized and filter. Add to the filtrate sufficient acetic acid to render distinctly acid, and evaporate down to 50 cubic centimeters. Remove the crystals of potassium iodate which separate, and wash them several times with absolute alcohol, dry and preserve in glass stoppered containers. The process is in accordance with the equation: $KI + K_2Mn_2O_8 + K_2O = KIO_3 + 2KOH + 2MnO_2$.

An Improved Volumetric Precipitation Process. P. N. Raikow. (*Chem. Zeit.*, 1894, xviii., 484, 485.)—The cardinal fault of most volumetric precipitation processes is that no direct reading of the end-point is possible, filtration and trial of small portions of the clear filtrates being usually necessary. The author has found that many precipitates which remain obstinately suspended under ordinary conditions, and cause in the liquid being titrated an unmanageable turbidity, can be induced to collect and subside by the addition of some immiscible liquid heavier than water, e.g., carbon disulphide or chloroform. Such liquids, although exerting no solvent action on the precipitate, mix intimately with it and carry it down, leaving the supernatant liquid sufficiently clear for the observation of any turbidity produced by the addition of a further quantity of the standard precipitating solution. Carbon disulphide and chloroform are usually, but not invariably, effective. Thus, carbon disulphide carries down silver chloride rapidly and completely, but has no influence on the precipitation of barium sulphate. The application to particular cases of the principle here enunciated is being worked out by the author.

European Mineral Waters Classified.

Charles D. F. Phillips, M.D., LL. D., F. R. S. (Edin.), in the second edition of his "Materia Medica Pharmacology and Therapeutics of Inorganic Substances," classifies mineral waters as follows:

CARBONIC ACID WATERS.

Carbonic acid waters comprise many of various character, more or less impregnated with this gas, which renders them easier of digestion and chemically assists the solution of bicarbonates, e. g., of sodium and iron. Their medicinal properties are, to lessen gastric irritability, to stimulate slightly the secretions of the stomach and of the kidneys and to increase the peristaltic action of the intestines.

Baths in water bubbling with the gas are given with gentle and pleasant stimulating effects, at Schwalbach, Franzensbad, Tarasp-Schuls, etc., but for drinking purposes, almost the only water of this class that is generally known is the *Johannis*, obtained from borings in the rock at Zollhaus, Nassau. This spring has the appearance of boiling water, so great is the amount of carbonic acid gas constantly escaping; its odor is perceptible, and a lighted match placed over the water is extinguished; the analysis of the gas gives 98.98 per cent. of pure carbonic acid, and besides aerating the water, sufficient is given off to fill steel cylinders, when it is liquefied for export. Some iron contained in this water is precipitated before bottling.

Many other waters though more or less of the same gas, find their place rather in the following classes, because of a more notable proportion of solid ingredients.

SALINE WATERS.

(a) *Alkaline waters* (containing carbonate of sodium as a main ingredient) are such as those of Vichy and Neuenahr, Salzbrunn, Mont Doré, Bilin, Gieshubel, Apollinaris, etc.

(b) *Muriatic soda waters* contain in addition sufficient chloride of sodium to correct the dyspepsia or debility sometimes induced by a pure soda water, and are those of Luhatschowitz, Ems, La Bourboule, etc.

These and the preceding waters contain often free carbonic acid and may be warm or cold. They are ordered in cases of acid gravel, gout, venous stasis, and abdominal obstruction, in scrofulous exudations, in diabetes, and in chronic catarrh especially, waters containing chloride are to be preferred.

(c) *Bitter waters* ("purging saline waters") containing sulphate of sodium and magnesium as chief ingredients are such as Friedrichshall, Hunyadi Janos, Pullna, Seidlitz, Epsom, etc.

One or two wineglassfuls of these waters (preferably taken warm), act as mild saline purgatives. They are useful in habitual constipation, especially when this is connected with torpor or congestion of the liver; but if given too frequently, or in excessive doses, they are apt to bring on flatulence, dyspepsia, or intestinal catarrh in delicate subjects.

(d) *Compound soda waters* (containing sulphate of sodium in effective doses) are Carlsbad, Marienbad, Franzensbad, Tarasp, etc., (v. pp. 236-6). These are ordered in gout, gravel, diabetes, and catarrh, like the simple soda waters, and also more especially in dyspepsia, corpulence, jaundice, gallstones, and hyperæmic enlargement of the liver, and in hemorrhoids occurring in plethoric persons. These waters if freely used are markedly lowering in their action.

(e) *Common salt waters* include those of Homburg, Kissingen, Baden-Baden, Wiesbaden, Reichenhall, Kreuznach (v. pp. 336-43), Harrowgate, etc. Some are cold, others warm, and are either drunk or used as baths.

These waters in moderate quantity are of benefit in dyspepsia and gastric and intestinal catarrh; also in constipation and stages of abdominal plethora, and for hemorrhoids and venous stasis occurring in thin depressed subjects; also in bone disease and scrofulous exudations, inflammatory effusions, and glandular and even fibroid tumors.

Strong salt springs (Droitwich, Hall, Ischl, Nauheim) are used as baths.

SULPHUR WATERS.

Sulphur waters, which contain alkaline sulphides or sulphuretted hydrogen, are found at Aix-la-Chapelle and Aix-les-Bains, Weilbach, Bâreges, Lûchon, Cauterets, Harrogate, Llandrindrod, Moffat, Lisdoonvarna, etc. They are used for chronic syphilitic and scrofulous disorders, bronchial catarrh and phthisis, chronic hepatic congestion, chronic rheumatism, and metallic poisoning, such as that from lead or mercury. The digestive powers are liable to be taxed by a course of these waters, and more or less anemia is apt to follow. Good meat diet is desirable whilst sulphur is being taken.

EARTHY MINERAL WATERS.

Earthy mineral waters (containing a relatively large proportion of lime). Rehme, Eilsen, Leuk, Weissenburg, Wildungen, and many other waters, contain a small proportion of carbonate of calcium and of magnesium. The special springs named are used in vesical catarrh and uric acid concretions, in gouty and scrofulous exudations and skin diseases, also in bronchial catarrh and phthisis. Separate classes are made by some authors, e. g., of the iodobromated waters at Kreuznach and Woodhall, and the muriated lithia waters of Baden-Baden.

CHALYBEATE WATERS.

Chalybeate waters, those in which iron carbonate is the main ingredient, are such as Spa, Schwalbach, Tunbridge Wells, Driburg, Pyrmont, Harrogate. The sulphate occurs in springs at Brighton and at Sand Rock (Isle of Wight); the perchloride in a spring at Harrogate (Muspratt's).

ALKALINE WATERS.

The principal spas with simple alkaline waters are: Hot—Vichy, Neuenahr, Mont Doré, Chaudes, Aigues; the

last three being feebly mineralized. Cold—Apollinaris, Salzbrunn, Vals, Lœ Boulou, Evian, Bilin, Fachingen, Geilnau, Wilhelmsquelle, Tanus, Gieshübel, Soultzmat and Marcollo.

Vichy, in central France, 780 feet above the sea, is situated on the river Allier, in a large open valley surrounded by vineland hills; the climate is mild; the season is from the middle of May to mid-September. The arrangements are on a magnificent scale, and the spa is the most frequented in Europe (Braun).

The springs used are nine in number, all clear, warm, and tasting more or less like soda water. They contain from 36 to 39 gr. of bicarbonate of sodium in each pound (16 oz.), from 12 to 14 cub. in. of carbonic acid, and small quantities of chloride of sodium (4 gr.) of bicarbonate of potassium, and magnesium, and arseniate of sodium.

They may be used in any case in which strong alkaline waters are indicated, and either for bathing or drinking or both. The Grande Grille, which has a temperature of 113° F., is in most repute, especially for hepatic disorders, the Celestins for urinary maladies and the Hôpital for abdominal stasis and chronic enteritis. The Haute-rive, four miles from Vichy, is cold and contains an unusually large amount of carbonic acid. Cusset, two miles from Vichy, has also a thermal spring, the water of which is highly mineralized. One spring at Vichy is intermittent and contains sulphur; it is not, however, now used medicinally.

Amongst the advantages of Carlsbad, Braun reckons the careful diet, and amongst the disadvantages "an excessive use of coffee" (*B. M. J.* ii., 1887 i., 1888). The valley is rich in warm springs, which differ little in their fixed constituents, though much in their temperature and gaseous contents. The Sprudel, which forms a fountain several feet high, giving off clouds of vapor, has a temperature of 164° F., contains 11.8 cub. in. carbonic acid, and sulphate of sodium 18 gr., chloride 7 gr., carbonate 10 gr. with a little lime, magnesia and iron. The Schlossbrunnen at 124° F. contains 17 cub. in. carbonic acid. The Markbrunnen at 130° F. contains in addition some iodide and bromide of sodium.

Marienbad, also in Bohemia, and about five hours' drive from Carlsbad, is situated in a broad and beautiful valley about 1,900 feet above the sea. The air is not mild but is pure and dry, "and colds are less often taken here than at Carlsbad." It is also quieter and less crowded and is more frequented by ladies. Marienbad is the principal representative of cold gaseous sulphate of sodium waters, and the springs most used, the Kreuz and the Ferdinandsbrunnen, are stronger than the Carlsbad springs, and contain more free carbonic acid. They are more aperient and given therefore in smaller doses (one to six tumblerfuls), or to patients who need more purging. In other respects and excepting in diabetes, these waters are used like those of Carlsbad. They contain some iron, which, however, is not of importance, unless in the Kronprinz-Rudolf spring.

COMMON SALT WATERS.

The waters under this head are the following: In Germany—Homburg, Kissingen, Baden-Baden, Wiesbaden, Reichenhall, Kreuznach, Rehme (Ceynhaus), Nauheim, Soden, Pyrmont (which contains iron springs as well), Hall in Austria, Hall in the Tyrol, Hall in Würtemberg, Ischl, Kreuth, Durkheim, St. Gervais, Salzungen, Canstatt, Cronthal, and several others. In France—Bourbonne-les-Bains, Balaruc, Salins. In Italy—Ischia, Castellamare, Monte Cattini, La Porretta. In Switzerland—Bex. In Great Britain—Droitwich, Nantwich, Middlewich, Woodhall, Harrogate and Cleff. Leamington and Cheltenham contain also much common salt in addition to sodium sulphate.

Homburg, about nine miles from Frankfort, pleasantly situated on the southern slope of the Taunus mountains, 600 feet above the sea, has a fresh and bracing climate even in the summer, though the growth of trees and of houses has made some portions less fresh. The Elizabethbrunnen (the most used spring) contains 75 gr. of chloride of sodium, the Kaiserbrunnen 55 gr., whilst both have also other alkaline chlorides, lime magnesia, a little iron and much carbonic acid, at a temperature of 50° F. (cold). The Ludwigsbrunnen contains only about half the amount of chlorides, and the Luisebrunnen scarcely any calcium of magnesia.

The two springs first named are stronger than those of Kissingen, and given in doses of two to four tumblers in cases of dyspepsia and gastrointestinal catarrh, constipation, strumous glandular enlargement, gout, obesity, hypochondriasis, etc. The Luisebrunnen is "very suitable for anæmia and Indian cachexia."

Kissingen, about thirty miles from Würzburg, and 600 feet above the sea, in the pleasant valley of the Saale, is the main representative of cold, moderately strong gaseous salt springs, and is one of the most fashionable watering places of Germany. The principal springs are the Ragoczi, the Pandur, and the Maxbrunnen; the latter is a very weak salt water; the other two are nearly equal in strength, containing more than 40 gr. of chloride of sodium with small quantities of other alkaline chlorides, 4 gr. of sulphate of magnesium, 2 gr. of lime, a trace of iron, and much carbonic acid (40 to 48 cubic inches); the temperature is 51° F. (cold). The Ragoczi is generally taken in the morning (three to six glasses); the Pandur, being somewhat milder in the evening.

Wiesbaden, capital of the former Duchy of Nassau, is 323 feet above the level of the sea, and is situated beautifully on the southern slope of the Taunus mountains, five miles N. W. of Mayence. The climate here is mild, in winter being one of the warmest in Germany, in spring and autumn usually fine, but at midsummer hot and relaxing. The season is from June till September. The principal spring is the Kochbrunnen, which rises like a boiling well at 150° F., emitting clouds of steam. Its constituents are

similar to those of the Kissingen Ragoczi, viz., chloride of sodium (52 gr. in the pound), carbonate of calcium (3 gr.), and traces of potassium, magnesium, iron, etc. The amount of carbonic acid is much less (6 cub. in.), the temperature much higher. The amount of chloride is slightly greater than that at Kissingen, but yet larger doses of the water can be taken, and increased intestinal secretion less often occurs from it.

The most suitable cases for Vichy are those of uric acid gravel and calculus, gout, vesical catarrh, and chronic glycosuria. But besides these a large number of other maladies are treated there with more or less success, such as dyspepsia, gastric catarrh, enlargement of liver and spleen, abdominal congestions, chronic metritis, and chronic rheumatism. The dose of the water is from a half pint to two pints daily.

Vals, in the southeast of France (Department Ardèche), is an important spa with cold alkaline springs, similar in composition to the waters of Vichy. The principal ones, Precieuse, Desirée, Madeleine, and Rigolette, contain rather more bicarbonate of sodium, carbonic acid and iron. The two former, slightly laxative, are employed in gouty and renal disorders; the two latter are more roborant. St. Jean is less alkaline, and is ordered for dyspepsia; Dominique is arsenical. The waters of Vals and Vichy are largely exported, and keep well when bottled.

Neuenahr, in Rhenish Prussia, 300 feet above the sea, in the mild and beautifully wooded valley of the Ahr, is easily reached from Cologne. It has excellent buildings and public gardens, and possesses a cold spring rich in carbonic acid, and four warm springs, 93 degrees to 104 degrees F., each containing about 9 gr. in the pound of bicarbonate of sodium, with a small proportion of calcium and magnesium, much carbonic acid, and very little chloride of sodium or iron.

Bilin, in Bohemia, and **Fachingen**, in the valley of Lahn, contain strong soda springs, which, however, are but little used on the spot, though they are exported in large quantities. The water of Bilin contains 33 degrees of bicarbonate in the pound, with chlorate 2 gr., and sulphate 6 gr., lime 4 gr., a trace of iron, and much carbonic acid, at a temperature of 53 degrees F., and generally requires to be heated. That of Fachingen is very similar, but somewhat weaker. Both are used for severe cases of gravel, gout and vesical catarrh.

The water of **Gieshübel**, near Carlsbad, contains a small proportion (10 gr. to the pound) of bicarbonate of sodium, with a large amount (55 cub. in. to the pound) of carbonic acid. It is pleasant and refreshing, and exerts a moderate antacid effect.

Apollinaris water, from the spring of that name, situated near Neuenahr, in the valley of the Ahr, contains about 10 gr. of bicarbonate, 5 gr. of chloride, 2 gr. of sulphate of sodium, and 3 gr. of magnesium carbonate, with a large amount of carbonic acid to the pound, so that it may be warmed without losing its pungency.

It is useful as a table water in irritable conditions of the stomach, and as a medicinal water in the lithic acid diathesis and gout; also in bronchial catarrh and tendency to gall-stones.

MURIATIC SODA WATERS.

The chief muriated alkaline waters are: Hot—Ems, Royat, and La Bourboule. Cold—Luhatschowitz, Selters, Gleichenberg, Roisdorff, Rossbach, Vic-sur-Cère and Tonnestein.

Ems, near Coblenz, in the valley of the Lahn, 291 feet above the sea, is the oldest and most famous soda spring. It is conveniently reached from England, has excellent hotels and English-speaking physicians. The valley is narrow, between high mountains, with attractive scenery and possessing a mild climate.

The main difference between the springs is in temperature, the Kranchen being at 84 degrees F., and the Kessel at 114 degrees F. They are often given with goats' or asses' milk, and are used for chronic bronchial disorders with irritable cough, but little secretion; in the dyspepsia of persons disposed to phthisis, and for eczema and prurigo; also for lithuria, though less often than those of Vichy.

La Bourboule, in the Auvergne district, 2,600 feet above the sea, has five springs of different temperatures (varying from 82 degrees to 140 degrees F.), all containing carbonate and chloride of sodium and appreciable quantities of arsenic, but in different proportions; they also contain a large amount of carbonic acid in solution. These waters are recommended in cases of scrofula, diseased bones, rheumatism, asthma and rickets.

Royat, in the same district, with the town of Clermont-Ferrand about a mile and a half from it, is very rich in hot mineral springs. In addition to the chloride and bicarbonate of sodium, there are also small quantities of lime and iron. These waters are especially useful in cases of anæmia, scrofula, and rickets (Lancet, ii., 1887).

BITTER WATERS.

The waters included under this head are those of Friedrichshall, Hunyadi Janos, Pullna, Seidlitz, Galthof, Seidenschütz, Birneusdorf, Iwanda, Aranjuez, Bergentheim, Epsom, Beulah Spa, Purton Spa, Cheltenham, Leamington, Scarborough.

The **Friedrichshall** water, which is largely imported from a spring in Saxemeiningen, contains in a pound, sulphate of sodium 61 gr., chloride of magnesium 30 gr., and sulphate of calcium and potassium, with a small amount of carbonic acid (Liebig). This water is useful in small non-aëriated doses for promoting tissue change, and in aperient doses is frequently prescribed for habitual constipation, hepatic congestion, abdominal plethora, etc.

The **Hunyadi Janos** waters contain in sixteen ounces 138 gr. of sulphate of magnesium, 129 gr. of sulphate of sodium, with 11 gr. of chloride, and 13 gr. of carbonate of sodium. They are used in the same class of cases as those last mentioned, but are more active and are rather less unpleasant to the taste;

the same observation applies to *Æsculap* and Franz Josef.

Pullna water is of the same character, but intermediate in strength between Friedrichshall and Hunyadi Janos, containing 123 gr. of sulphate of sodium, and 93 gr. of sulphate of magnesium, some magnesium carbonate and chloride of sodium.

Seidlitz contains no sulphate of sodium, but 104 gr. of sulphate of magnesium.

The once famous *Epsom* well contains in the pound 240 gr. of sulphate of magnesium, to which it has given its name.

COMPOUND SODA WATERS.

The principal waters of this kind as those of Carlsbad, Marienbad, Franzensbad, Tarasp-Schuls, Elster and Bertrich are modified by their temperature.

Carlsbad, in Bohemia, situated on the banks of the Tepl, in a narrow wooded valley, is the oldest of German spas. The season is from the end of May to the end of September; at other times the climate is "rough," often damp, though in May it is often not more than fresh and bracing.

The Chlorine in "Adeps Lanæ."*

By DR. OSCAR LEIBREICH.

Mr. Arnold has made the statement, in No. 4 of your journal (*Pharm. Zeit.*), that "Adeps Lanæ, N. W. K." does not contain chlorine in the form of an impurity.

As Dr. Rothmann has proven clinically that "Adeps Lanæ, N. W. K." has an injurious therapeutic effect, and as his statement has been recently corroborated by other observers and by Dr. Rothmann himself, who has found chlorine in the preparation used by him, I have considered it important to further investigate in this direction, especially with a view of ascertaining whether, through a remarkable coincidence, a large number of conscientious analytical chemists received only "Adeps Lanæ" which contained chlorine, while Mr. Arnold alone received "Adeps Lanæ" free from chlorine—I found that the coincidence referred to did not exist.

Dr. Saalfeld (in whose polyclinic the comparative trials of Adeps Lanæ and lanoline have been carried on) requested me to have chemical analyses made. I refused, referring him to analytical chemists of repute.

The analytical chemists selected were the following named gentlemen:

No. (1) The government chemist, Dr. Bein.

No. (2) Dr. C. Friedheim.

No. (3) Dr. C. Virchow.

These three chemists were given unsealed tins containing "Adeps Lanæ," bought through a pharmacist and the findings by them were as follows, viz.:

No. (1) Dr. Bein.....	0.310 chlorine
No. (2) Dr. Friedheim.....	0.305 "
No. (3) Dr. Virchow.....	0.333 "

In sealed tins:

No. (1) Dr. Bein.....	0.120 chlorine
No. (2) Dr. Friedheim.....	0.196 "
No. (3) Dr. Virchow.....	0.730 "

*Translated from the *Pharmaceutische Zeitung*, 1894. No. 46.

A number of similar analyses were made with different specimens and the above figures represent the average percentages of chlorine found.

This goes to show that "Adeps Lanæ N. W. K.," whether received in sealed or unsealed tins, at all times contains chlorine in constant quantities and that, therefore, the injurious therapeutic effects observed when Adeps Lanæ was employed are readily explainable.

Adeps Lanæ "N.W.K."*

By H. BECKURTS.

Braunschweig, Germany.

In December, 1892, I first examined the therapeutic product which, under the name of "Adeps Lanæ," was placed upon the market by the Norddeutsche Wollkammerei und Kammgarnspinnerei of Delmenhorst, near Bremen. As the result of this examination I came to the conclusion, in agreement with Fresenius, Benedikt, Arnold and Vulpis, that it was a pure product, and well fitted to serve as an ointment basis. Within a very few months thereafter there appeared public communications from Leibreich and others, claiming that Adeps Lanæ was an imperfectly purified wool fat, being especially contaminated with chlorine. These statements have been repeated so often during the last few months that I have finally been obliged to undertake a new series of experiments with the article, to determine beyond peradventure whether the truth lay with my own earlier assertions or in the claims advanced by Leibreich.

For this purpose I employed several specimens of Adeps Lanæ "N. W. K.," which I obtained from various local druggists and apothecaries, and also six specimens which Dr. Damköhler of Bremen, had the kindness to select for me at Delmenhorst, at the warehouse of the company, from among a large number of sealed packages. Experiments similar to those undertaken with the Adeps Lanæ were also made with the Lanolinum anhydricum of Leibreich.

THE RESULT.

The results of these experiments were completely confirmatory of the assertion made in my former paper, that Adeps Lanæ answers all the requirements of the German Apothecaries Union.† Contrary to the assertion of Leibreich, the quantity of free acid in both varieties is extremely small. If 2 grams of Adeps Lanæ are dissolved in ether, and the solution is then decomposed by the addition of two drops of phenolphthalein solution, 0.3 cubic centimeters of a $\frac{1}{10}$ sodium-potassium solution at most were required to redden it. According to Leibreich,‡ an essential difference between the Adeps Lanæ and the Lanolinum anhydricum is shown by the fact that the former turns to a more or less marked chestnut-brown color when maintained for half an hour at about a

temperature of 110 degrees in the oil bath; while Lanolin does not change. The conclusion is drawn therefrom that Adeps Lanæ "N. W. K." is readily decomposable. I must take issue with Leibreich on this point; not one of the samples of Adeps Lanæ examined by me underwent the slightest change of color after being kept in the oil bath for half an hour at a temperature of 120 degrees.

In the third place it is stated that Adeps Lanæ "N. W. K." contains chlorine. Of course chlorine compounds are meant, since free chlorine or hydrochloric acid could not possibly be present. This being the case, all conclusions like those of Rothmann, which are based on the supposed presence of free chlorine, are manifestly incorrect, and are absolutely valueless in the consideration of the therapeutic usefulness of the Adeps Lanæ.

METHODS PURSUED.

To find the amount of chlorine present Leibreich boiled 0.5 grams of the woolfat with absolute alcohol in a test tube, filtered it when cold, and added to the filtrate a few drops of concentrated alcoholic solution of nitrate of silver. He claims to have obtained in this manner an abundant precipitate of chloride of silver from the woolfat of the Norddeutsche Wollkammerei. Arnold* has already refuted this assertion. He has demonstrated the fact that the alcoholic woolfat solution must be entirely cold, or the cooling caused by the addition of the alcoholic silver solution causes a precipitation of the excess of woolfat, which the observer is liable to mistake for chloride of silver. Dr. Rothmann did not take this precaution in repeating Leibreich's experiments; and he reported that he found an abundant milky precipitate of argentic chloride. More recently Leibreich* explains the fact that some observers have not succeeded in demonstrating the presence of chlorine in the Adeps Lanæ in that they have neglected to warm the alcoholic woolfat and the silver nitrate solutions. When this is done, it is noticed that the precipitate increases from moment to moment. And as the chloride of silver apparently forms gradually, Leibreich concludes that the chlorine in the Adeps Lanæ does not occur as a chloride, but is present in organic combination in the form of chlorinated cholesterin ethers. The instability of these organic chlorine combinations is the reason why Adeps Lanæ sometimes contains free chlorine or hydrochloric acid.

But even if we admit the presence of these chlorinated cholesterin ethers, it is impossible to suppose that spontaneous decomposition takes place with the production of hydrochloric acid or free chlorine.

RESULTS FROM BOTH UNIFORM.

And now let us return to our experiments with the woolfats and their chloride of silver reaction! 0.5 gms. each of Adeps Lanæ and Lanolinum anhydricum Leibreich were tested with 10 cubic centimeters of boiling absolute alcohol, filtered after they had become cold, and the filtrate decomposed with the alco-

*Translated from the Berlin *Pharmaceutische Zeitung* for 1894, p. 395.

† Drugs not included in the Pharmacopœia of the German Empire (*Pharmacopœia Germanica*, edited, 1891). Berlin, 1891, p. 13.

‡ *Pharm. Zeitg.*, 1893, 361.

* *Pharm. Zeitg.*, 1893, p. 361.

holic silver solution. In neither case was there any change in the mixture. Even the application of heat caused no change at first; it had to be long continued before a faint grayish brown discoloration began to appear. This precipitate dissolved readily on the addition of nitric acid and subsequent boiling with alcohol. It consisted of metallic silver, and was caused by the reduction of the silver nitrate under the influence of the fat. As we might expect, Adeps Lanæ lanoline behaved alike in this respect.

LEIBREICH'S PRECIPITATE METALLIC SILVER.

Leibreich's precipitate of chloride of silver was really metallic silver, and its appearance under the above conditions was not to be wondered at.

It is impossible that Leibreich's precipitate could have been an abundant one, as he claims, if only 0.5 gms. of the woolfat were treated in the manner described.

According to the same authority Adeps Lanæ contains 0.25 per cent. of chlorine, estimated after the method of Carius (see below). Admitting, for the sake of argument, that the precipitate was chloride of silver, and not the metal itself, and that all the chlorine present had been set free by the boiling with the silver nitrate, 0.5 gms. of woolfat would give only 0.0051 gms. of the chloride of silver. This amount might give a faint opalescence to the mixture, but it would not make it milky, and certainly never cause an abundant precipitation.

Thus Leibreich's assertion that the chemical testimonials as regards the purity of Adeps Lanæ were based on insufficient analysis, is thus shown to be entirely wrong.

I next proceeded to make a quantitative analysis of the woolfat as regards the amount of chlorine that it contains; using for that purpose the specimens of Adeps Lanæ kindly furnished to me by Dr. Damkohler.

QUANTITATIVE ESTIMATION OF CHLORINE.

Carius's method of chlorine estimation consists in heating the woolfat in a sealed tube with chlorine-free nitric acid and nitrate of silver, at a temperature of 180 degrees for a period of eight hours. It is not a very suitable method for our purposes, for it does not permit the use of a quantity of woolfat large enough to be of use when there is only so small a proportion as 0.25 of chlorine supposed to be present. A quantity as small as 0.5 gms. contains so little chlorine that exactitude of estimation is almost impossible. I have endeavored in vain to determine the amount of chlorine in 2 gms. of the woolfat by this method. The sealed glass tubes were invariably destroyed by the enormous pressure developed during the heating. I cannot therefore feel that the chlorine analysis after the method of Carius made by Leibreich and others are satisfactory.

I therefore had recourse to other methods of chlorine estimation. I have used Benedikt's method, heating the woolfat with lime, dissolving in chemically pure nitric acid, and adding the nitrate of silver. I have also em-

ployed a melted mixture of soda, free from chlorine and salpeter. With 3 gms. of Adeps Lanæ and Lanolium anhydricum nitric acid solutions were obtained, which, on the addition of nitrate of silver, did not change at all at first. After a time they both became faintly opalescent. But even here a quantitative estimation of these infinitesimally small quantities of chloride of silver was not possible. When I collected the chloride of silver obtained in five experiments, I obtained a mass which represented a percentage of 0.007 of chlorine. Lanoline and Adeps Lanæ showed exactly the same proportion of the element.

These criticisms of Leibreich's investigations are equally true of those published by Rothmann and P. Lohman,* who both used Leibreich's method, and found free chlorine in Adeps Lanæ. Lohman claims to have bought a specimen of Adeps Lanæ in Berlin which had a decidedly repulsive odor. The scientific agent of Messrs. Jaffe & Darmstaedter seems to have been luckier in finding faulty specimens of Adeps Lanæ "N. W. K.," than I have. I can simply repeat my conviction that in Adeps Lanæ "N. W. K.," we have a pure ointment basis, and one which is in every respect equal to lanoline.

How to Use the Hand Camera.

Focusing in a hand camera is largely a matter of practice. It is usually necessary to be of rapid movement when making an exposure, and there is seldom time to examine the image on the ground glass. While focusing finders are theoretically of enormous value, they have been but little adopted, owing partly to their expense and partly to the fact that after all they are not really necessary. They are certainly a luxury, but to a careful worker not a necessity. Whenever possible it is well to focus by examination of the image on the ground glass. But with a little practice the beginner will learn to so nearly approximate the correct focus as to make such examinations quite unnecessary. In the hand cameras so largely in use to-day it will be found that if the focusing index be set opposite the scale mark for the greatest distance everything will be apparently sharp, excepting objects very close indeed to the camera. But focusing is a matter for practice.

THE EXPOSURE.

With regard to exposure it should be remembered that everything depends upon the exposure and development. Properly expose and develop a plate, and you have a good negative. Under the heading of exposure, selection of subject may well be classed. The beginner usually will be guided by nothing but his own sweet will, and if he will in turn be profited adequately by his results, there is no harm done. But a moment's thought will often save a plate. First, see that foreground, middle distance and background are of a character calculated to bring about a picture similiar to that you had in mind

when determining on making an exposure. Next avoid a preponderance of foreground and see that the camera is level. Unless the subject is well lighted, leave it alone. Beginners usually pay but little attention to the time of exposure, using the same speed of shutter all the time and rarely changing the diaphragm. But by varying both of these no little benefit is derived. There is no necessity for the highest speed of the shutter when photographing anything but rapidly-moving objects that are fairly close to the camera. Give as long an exposure as possible consistent with a sharp rendering of the image.

THE DEVELOPING SOLUTION.

As to development the majority of amateurs use one-solution developers. With these some little change may be made by diluting the solution or by adding a little carbonate of soda or potassium bromide as occasion requires. But for intellectual development we would strongly recommend two-solution developers, and pyro. and soda as the best adapted for all-round work. With exposures made out of doors with the hand camera there is no means of accurately judging as regards over or under exposure, and the developing process must be so conducted that in either case a good negative may be obtained. An under-exposed negative may be improved, if, before the high lights have become too dense, a strong effort is made to bring out detail in the shadows. An over-exposed negative will not be so flat if, before the general detail is all out density is imparted by using less alkali, or by the addition of potassium bromide.

The developing solution may be said to have three active ingredients: the reducing agent (pyro., hydroquinone, eikonogen); the accelerator (carbonate of soda); and the restrainer (potassium bromide). Increase of pyro. gives increase of contrast; increase of carbonate of soda gives increase in detail and in speed of development; and increase of bromide gives increase of contrast and retards development.

DEVELOPING THE PLATE.

Having, then, these three factors, and bearing in mind the part each plays in development, it becomes comparatively easy to develop if the exposure has been approximately correct. The solutions may be made up according to any of the given formulas, and development commenced with rather less than the required quantity of carbonate of soda. If the image comes up slowly and is lacking in detail, add a few drops of the soda solution. We recently saw a professional photographer add this accelerator by pouring it in one corner of the tray. This is so obviously incorrect that any further mention of it is unnecessary. Any solution that it is desired to add to the developer should be poured into a graduated measure and the bulk of the developer added to it, the mixture then being poured over the plate.

During development certain contingencies may arise which are better met by the knowledge of a few dodges. Cer-

*Pharm. Zeitg., 1894. 325.

tain portions of the image may have been considerably under-exposed, and a sufficient increase of carbonate of soda to the solution to accomplish their development would hopelessly over-develop other portions of the plate. These obstinate parts may be greatly improved either by lightly brushing them with a camel's-hair brush charged with a dilute solution of sodium carbonate, or, if but little increase is desired, by holding the plate quite close to the mouth and breathing on those parts that are under-developed. If, on the contrary, some parts are so over-exposed as to show signs of clogging up before the rest of the plate is properly developed, these portions may be held back by brushing with potassium bromide solution.

Gonorrhœa and its Effects.

The *Hospital* publishes an article on this subject in which the author remarks that gonorrhœa is a disease which deserves more careful consideration than is often given to it. It may be merely a specific and contagious form of urethritis, or it may be a widespread disease affecting eyes, joints, and lymphatics, as well as the whole genito-urinary tract from the testicles to the meatus, or from the ovaries to the vulva. The importance attributed to the disease, he says, depends largely on the point of view from which it is regarded. We must go beyond the gleet, the strictures, and the urinary troubles; we must consider the leucorrhœa and failing health of so many women, the inflamed fallopian tubes, the resulting sterility, or the inflammations and abscesses arising after parturition, and in the next generation the loss of sight, together with rickets and tuberculosis resulting from early weaning. These are the things which must be looked at in order to estimate completely the importance of the gonococcus and its doings.

With regard to the treatment of acute purulent gonorrhœa, says the author, there is no great difference of opinion as to the propriety of rest, abstinence, alkalies, laxatives, and cleanliness. There is, however, some difference as to local treatment, some medical men maintaining that with the exception of warm bathing no local treatment is admissible; whereas others strongly recommend hot irrigations. These, however, should be of the mildest nature, very weak solutions of permanganate of potassium at a temperature of about 105° being the most useful. The abortive treatment is a question of importance; some physicians think it useless and dangerous, and others pin their faith to it. If it is employed, it must be undertaken at the very beginning, says the author, in the stage of itching and gumming, and not in the full discharge, and considerable experience seems to have been gathered during recent years pointing to its efficacy if undertaken at that period. In the earliest stages of the disease the virus lies very superficially, and can be destroyed by prompt therapeutics. Mere injections, however, are not sufficient for the purpose. The mucous membrane of the anterior portion of the urethra, and

especially of the fossa navicularis, should be thoroughly rubbed with a pledget of cotton wool wound on a probe, and after this rubbing, when all the mucus and the superficial epithelium have been dislodged from the inflamed membrane, a small quantity of a two or a three per cent. solution of nitrate of silver should be injected and allowed to remain for a few minutes. The injection should be repeated the next day. If the disease has not penetrated too deeply, it will be aborted, and much suffering will be saved.

It is after the acute stage has subsided, says the author, that infection is more apt to spread, for, although the disease may pass away completely under careful treatment, it happens in a number of cases that some gleet discharge, which is certainly infectious, continues for a long time; in fact, it is very difficult to know when the capability of infection ceases. In the great majority of cases, by careful living, by the use of balsams, and by local treatment of the urethra by means of bougies or injections, this gleet condition may be removed. Sometimes the continuance of this discharge is due to the existence of small points of ulceration or patches on which granulations have developed, or to the presence of disease in the posterior part of the urethra which continually infects the parts in front, and against these conditions general medication is helpless. These things require special instruments and experience in the use of them, and, if the ordinary treatment fails, the patients should be sent to a specialist, for, above all things, continues the author, it is essential that they should be cured.

A Legal View of Physicians' Remuneration.

A writer in the *New York Law Journal* comments on Dr. William A. Hammond's article, *What Should a Doctor be Paid*, published in the June number of the *North American Review*. After quoting Dr. Hammond's reference to the willingness with which great sums are paid to brigands for ransom and the reluctance with which much smaller fees for conspicuous medical services are paid, the writer says:

"We are glad that this illustration was used, for it brings out the essential vice of Dr. Hammond's contention so forcibly that extended counter argument is unnecessary. The discussion has a bearing upon fees for legal services as well, and, as to both professions, the theory above set forth logically involves a system of banditti's ransom, rather than conscientious service to mankind for a fair and just compensation, determined by the comparative seriousness of the service and the standing and experience of the doctor or lawyer rendering it.

"Dr. Hammond draws envious comparisons between fees of physicians and those of lawyers, which latter often are to an extent determined not by intrinsic standards, but by the *rem* involved. This distinction, when it exists, arises from the nature of the *rem* itself. Where rights of property are the only thing concerned in a legal proceeding,

it is not improper that the value of the property gained or protected for a client should enter as an element in the problem of determining the proper remuneration. In cases where it is allowable for lawyers to undertake business on contingent fees, the justice of a proportionate rate of compensation will be quite generally recognized. Ordinary collection business obviously falls under the same rule, as does also conveyancing, where a principle not unlike that of insurance comes into play. Forms of legal business that are more analogous to medical services are criminal proceedings and matrimonial cases. The contention has been made, and even judicially sanctioned, that it is legitimate for a jury to gauge the value of legal services in defending a person on a criminal trial according to the latter's wealth, which proposition we deem unsound in principle and inevitably tending to make legal practice a mercenary system of ransom or tribute. The temptation of an advocate to perform unprofessional acts and entirely lose sight of the proper restraints of an officer of the court, in defending a rich rogue on a criminal charge, would obviously be greatly increased if the counsel realized that success would legally entitle him to a certain proportionate share of the client's fortune, no matter how large it was.

"One passage from Dr. Hammond's paper, however, offers a suggestion toward the true rule for fixing charges for professional services which are purely personal in their nature. He says:

"The value of medical services is always great, and it is only the rich who can properly compensate the physician who renders them. When the same services are given to a poor person, it is impossible that they can be adequately rewarded, and hence smaller fees are cheerfully received. It is really not that the rich are charged more, but that the poor are charged less. It would seem right that medical fees should be arranged upon the basis of the patient being worth a certain amount (say \$100,000), and that the *honorarium*, if he chooses to use that term, should be adjusted accordingly, being more or less as the wealth of the patient was greater or less than the sum fixed upon."

"In dealing with rich patients and clients, physicians and surgeons, and lawyers acting in cases not involving specific property, should make out their bills not commensurately with the wealth of their employer, but simply on the basis that he is rich enough to pay whatever is right. The charges should be fixed according to the practitioner's standing and experience and the amount of labor involved, the customary rates of practitioners of equal standing in the same community for similar services being kept in view as a guide and a possible corrective. This general rule would not preclude the acceptance of smaller fees from poor people, but it would debar a practitioner from charging a man worth \$1,000,000 more than one worth \$100,000 for the same service. We believe it is essentially communistic and subversive of professional

conscience and dignity to charge a rich man all that can be screwed out of him, in order to make up for what one thinks he ought to have received on account of professional acts of charity or mercy."

Coloring Matters and Ferments.*

By J. F. PEAVY, M.D.,

Pollard, Ala.

In every change in nature, and incessant change is the order of nature, there are two general factors, matter and force. In the organic world, the light and heat of the sun constitutes the un-failing source of power supply for the building up of the almost infinite number and variety of forms. On the other hand, the combining activity of oxygen, which in organic nature is the compliment and correlative of solar force, gives to these forms, when living, the capacity of vital expression and finally restores them, when dead, to the condition of inorganic matter.

Force, like matter, is indestructible, capable, indeed, of infinite changes in direction or modes of expression but never lost. The various manifestations of force which constitutes the phenomena of life are dependent upon definite chemical reactions taking place between substances which nourish, build up and sustain the vital processes of organized forms.

These reactions with the force transmutations which they involve do not, as a rule, occur spontaneously through the direct operation of affinities between substances taking part in them, but are brought about through the agency of other substances which exercise peculiar dynamic functions. These substances are classed in physiology as coloring matters and ferments. It is to some thoughts concerning principally the first class, that attention is invited to this paper, which is written in the hope that the suggestions offered may prove of sufficient interest to induce some of the many competent investigators to direct their explorations into a field which, beyond doubt, will richly reward intelligent research. What I have to offer is not an elaboration of new facts, but rather a method of mentally regarding or interpreting facts already brought to light by the labors of others.

HÆMOGLOBIN AND CHLOROPHYL.

Hæmoglobin, the red coloring matter of blood, and chlorophyll, the green coloring matter of plants, stand in complementary relations to each other. They may be considered as placed at the two extremes of a series embracing between them the various catalytic agencies of organic life.

These two substances, together with others intermediate in the scale between them, perform functions of the highest importance in the various transformations of matter and transmutations of force, which constitute the nutritive processes and vital manifestations of organized forms.

Chlorophyll is concerned in building up from inorganic materials organic

compounds utilizing the energy of the solar rays, while hæmoglobin is concerned in oxidizing these compounds and liberating the stored-up force.

FUNCTIONS OF CHLOROPHYL.

Chlorophyll stands at the base of the nutritive processes of vegetable life and is the *entrepot* for a large part of the force which builds up the organic world, while hæmoglobin is an essential factor in the vital manifestations of animal life and, assisted by its derivatives the coloring matter of bile and urine, restores to inorganic nature the materials and force which have served their ends in the animal economy.

Chlorophyll, by giving, as it were, specific direction to the vibrations which constitute solar light and heat, tears asunder the atoms of O and C in the compound CO₂ and of O and H in H₂O, freeing O while the remaining elements are appropriated by the plant in the formation of carbohydrates and other compounds capable of reoxidation. Hæmoglobin, on the other hand, supplies oxygen, breaks up the carbohydrates and other oxidizable compounds and forms CO₂ and H₂O.

THEORETICAL CONSIDERATIONS.

Electricity, magnetism and chemism are closely related forces, if indeed they be not different modes of manifestations of essentially the same force. They all have the same ultimate basis in the capacity of matter for molecular polarization. Each may be developed by another, each converted into another. The special office of magnetism is to effect transmutations of force.

Most of the elements may be arranged into an electro-chemical series with the alkali metals, potassium, sodium, etc., with hydrogen at the positive, and the halogens, chlorine, bromine, etc., with oxygen at the negative end. Occupying a space in the middle of the series are the metals, iron, manganese and chromium. These metals present a strong resemblance in the variety in color of their oxides and salts, their behavior toward oxygen, their magnetic properties and the fact that they may occupy either the acid or basic side of salts. It is by reason of their position in the electro-chemical series, possessing as they do affinities in opposite directions, that the condition of bipolarity may be readily induced in them and they are hence distinctively magnetic. They are sometimes found on one side of the middle line manifesting acid or negative affinities, sometimes on the other manifesting basic or positive affinities, their difference in behavior depending upon special conditions in the different cases.

The coloring matters chlorophyll and hæmoglobin, by virtue of the iron which exists in them in the magnetic condition, possess the property of polarity. Furthermore, in a state of physiological activity, they are constantly undergoing reversals of affinities or poles. This probably involves a true mechanical, molecular motion, the molecules of chlorophyll and hæmoglobin serving as a mounting so to speak, for the atoms or particles of magnetic iron, and allowing their rotation by the adjustment of their own atoms. Mag-

netism is dynamic, that is, capable of producing effects, mechanical, electrical or chemical, only when the body in which the magnetic condition exists, or that upon which it acts, is in a state of motion; or the magnetism itself is varying, commencing, increasing, diminishing or ceasing, in which case the molecules themselves of the magnetic substance may be inferred to be in a state of motion. Its special office in nature, as observed before, is the transmutation of other forces, changing their directions so to speak, and specializing their activities. A permanent magnet may be viewed as a static condition of force, motion come to rest, yet embodying a capacity to take up motion and convert it into other modes of force.

POLARITY OF LIGHT.

The property of two-endedness, of right and left-handedness, though difficult to reduce to a distinct mechanical conception, pertains to light and heat as to the other physical forces. Their capacity for polarization, the reduction to definite planes and directions of the vibrations which constitute the essential nature of these forces, indicates their relation to the other polar forces. Faraday has shown that a ray of polarized light or heat may be deflected from its course by subjecting it to the influence of a magnet.

The color green, occupying, as it does, the middle of the solar spectrum, is interesting in this connection as an index to the capacity which chlorophyll possesses of abstracting the middle constituent, dividing the solar ray, and giving to the vibrations above and below green in the chromatic scale specific directions by virtue of which they polarize and set in motion the atoms of the magnetic metal, iron, contained in the chlorophyll. The magnetization of the iron, with motion superadded, develops electro chemical force. The condition of polarity and motion induced in the iron is a transitional condition of the force which is received on the one hand as vibratory motion and delivered on the other as electro-chemical force.

ELECTRO-CHEMICAL FORCE.

This electro-chemical force is expended in tearing apart the atoms of O and C in the compound CO₂ and of O and H in H₂O and becomes deposited, as it were, in the atoms of O on the one hand and of C and H on the other, to be again delivered up as heat, mechanical motion, muscular activity, etc., when these atoms again meet at the other border of the organic world. This attractive force of the atoms of C and H in the hydrocarbonaceous compounds, formed for the displaced oxygen, is the exact equivalent and complement of the solar energy used in parting them and constitutes the ultimate basis of all force manifestation in organic life.

UTILIZATION OF SOLAR LIGHT AND HEAT.

Plants, utilizing the energy of solar light and heat, manufacture out of materials drawn from the atmosphere and taken up from the soil by the roots, a variety of compounds starch, fats, al-

* Medical and Surgical Reporter.

bumen, etc. A part of these compounds fall from the elevated plane of "proximate principles" to the condition of simple binary compounds, the measure of which retrograde metamorphosis is the amount of CO₂ exhaled by the plant. This descent from a higher to a lower plane liberates force, which in conjunction with external heat, and acting through the agency of diastase and perhaps other catalytic agents more or less closely related to chlorophyll, lifts another part of these compounds to the grade of organized vegetable tissue. The greater part, however, remains as reserve stores of material and force, to be either used by the plant itself in the construction of parts subsequently developed, or to serve as food for animals.

Animals receive ready prepared for them in the vegetable kingdom, the materials for their structure embodying the capacities for the force evolutions which constitute the expressions of life. True, much of this material is raised to much higher planes, substances of exceeding complexity, of high molecular weight, being required to meet the demands of the extreme differentiation of form and function in the higher orders of animal life. In this lifting of pabulum for the formation and maintenance of organic structure force is consumed, contributed no doubt by the retrograde metamorphosis of other constituents of the food, but rendered available through the agency of so-called ferments. Some of these are, in all probability, products of the ductless glands, and as yet but little known.

CHARACTERISTIC DISTINCTION BETWEEN PLANT AND ANIMAL LIFE.

The great and striking characteristic of animal life, however, as distinguished from vegetable life, lies in the fact that its chemical processes are, in the main, reductions of matter with evolution of force, which finds expression as heat, sensory-motor force, etc. These reduction processes and force liberations are accomplished through the agency of hæmoglobin and its derivatives, the coloring matters of bile and urine. At the top of the scale of organic nature, we find beginning processes the exact reverse and complements of those we found initiated by solar energy through the agency of chlorophyll in the green leaves of plants. These processes end in the complete restoration to inorganic nature of the matter and forces which have performed their parts in the mystic play of that inscrutable something we call life.

The red corpuscles of the blood, by virtue of the iron which exists in them in some sort of union with their hæmoglobin, take up oxygen from the air in the lungs and deliver it up in the capillary circulation, returning with their hæmoglobin in the reduced condition. In making the circuit from the lungs, through the capillaries and back to the lungs, the hæmoglobin changes from the bright red of highest oxygenation to the violet of lowest reduction, passing no doubt through the whole gamut of colors. When it leaves the lungs it occupies the red or dynamic end, when it returns to the lungs, the violet or chemical end of the chromatic scale, its

color at each stage of the declension being the index to its dynamic capacity. At the point of lowest reduction its dynamic capacity is a minimum, its chemical affinity for oxygen, after it reaches the lungs, a maximum. At the point of highest oxygenation, its chemical affinity for oxygen is satisfied, its dynamic capacity a maximum. At the opposite extreme of the circuit this chemico-dynamic force, of which the hæmoglobin in its transit is the vehicle, is reconverted into heat and motion by the impact, as it were, of atoms which had been torn apart by the dynamolytic action of chlorophyll in the green leaves of plants.

THE CONDITIONS REQUIRED.

Chlorophyll and hæmoglobin, with the other catalytic agencies between them, require for the physiological activity certain necessary conditions. One of these is always heat or equivalent force in the ascending constructive, lifting force-consuming series on the one hand; another, the presence of oxygen with its capacity of unlocking force in the descending, destructive force-releasing series on the other. Solar force, either as the direct rays of the sun or as diffused daylight is necessary, furnishing as it does the *vis agendi* for the activity of chlorophyll. This activity, with the processes which depend upon it, ceases in the dark. The permanent withdrawal of light starves green-leaved plants to death. It has, however, been experimentally shown that plants will flourish in the electric light which is, after all, but a reproduction of the sun's rays.

Diastase could never imitate and carry forward the process of germination in seeds without the proper degree of heat. Heat is also just as necessary for the germination of an egg as for the sprouting of a seed.

TRANSMUTATION OF HEAT INTO CONSTRUCTIVE ENERGY.

The nature and mode of operation of the various substances which serve to transmute heat into constructive energy under the directive agency of animal and vegetable organisms, appear to me to furnish a rich field for study and practical experimentation.

The alkalinity of the blood and tissues furnishes an all-important condition for the activity of hæmoglobin in the animal economy. The alkalinity of the blood differs at the two extremes of the circuit. In the lungs, it reaches its highest degree because of the exhalation of carbonic acid. In the capillary circulation, it becomes less alkaline from the absorption of carbonic acid. In passing from the lungs to the capillaries, hæmoglobin crosses its equator between acid and basic affinities. In returning to the lungs, it recrosses to its region of positive attractions. In the lungs it is electro-positive and unites with oxygen, which is electro-negative. In the capillaries of the various organs and tissues of the body, it becomes electro-negative, repelling the oxygen.

As regards the effect on oxygen, it is essentially an ozonizing process, in which the atoms of O₂, the ordinary condition of oxygen, are disassociated and polarized in the same direction. In

this condition they cannot unite with each other though possessing in the highest degree the affinities of oxygen.

RATIONALE OF THE GUAIAECUM TEST.

It would seem, however, that the alkalinity of the blood, with its changes in degree at the extremes of the circuit, does not absolutely endow hæmogoblin with its polarity, or cause of itself alone the reversals of affinities. Blood outside the body will for a time manifest this property, as evidenced by its changes in color from red to purple or purple to red, according as oxygen is excluded or supplied. Even hæmogoblin if extracted unchanged from fresh blood will manifest this property.

An examination into the rationale of the guaiacum test for blood shows that even the hæmatin of old blood stains possess a remnant of this property, inasmuch as it is able to convert the antozone of peroxide of hydrogen into ozone. The basis for the property is beyond question in the essential nature of the iron which is contained. It is well known that a certain oxide of iron manifests, like the black oxide of manganese which has an analogous formula, catalytic activity. This peculiar form of activity, when traced to its ultimate nature, will be found to lie in the capacity of these substances for taking on and giving off oxygen, which capacity is itself dependent upon the magnetic nature of the metals, iron and manganese. When black oxide of manganese is mixed with chlorate of potash in the familiar process of preparing oxygen for laboratory purposes, there is needed but the proper degree of heat, molecular motion, to start or accelerate the revolutions of a multitude of molecular magnets, by which electro-chemical force is generated, which tears the oxygen from its combination in chlorate of potash and gives it off in the free state.

THE ALKALINITY OF THE BLOOD.

The alkalinity of the blood, however, with its changes in degree at the extremes of the circuit, is necessary to the performance of the physiological function of the red corpuscles, by determining the time and place at which the reversals of the oxygen affinities of hæmogoblin occur, causing them to occur at the opportune moment in each case. In the lungs, where alone oxygen is obtainable, the highest oxygen affinity of hæmogoblin is thereby developed. In the capillaries of the various organs and tissues of the body, where oxygen is needed to meet the demands of the ceaseless change, the highest repulsive force of hæmogoblin for oxygen is thus brought into action.

When the blood-cells die, their hæmogoblin undergoes a conversion into a substance which has been called hæmatoidin, the more complex molecule of the former breaking up and the atoms of C, H, N and O, rearranging themselves into the simpler molecules of the latter. The iron and sulphur are released and, in part, perhaps reappropriated by young cells, and in part used up in the growth of the horny tissues, hair, nails, etc.

This substance, hæmatoidin, is believed to be identical with bilirubin,

the yellow-red coloring matter of bile. Bilirubin has been found in old extravasations of blood evidently produced upon the spot by transformation of hæmoglobin. If red blood-cells be broken up and made to assume a liquid form by alternate freezing and thawing, and the solution injected into the veins of an animal, the operation is followed by a discharge of bilirubin in the urine. Under ordinary conditions, the liver extracts the coloring-matter from the blood-cells as fast as they die, completing their disintegration. Under other conditions, as the introduction into the circulation of certain poisons, or a depraved condition of general nutrition, the cells may die more rapidly than the liver can dispose of their coloring-matter, and jaundice of the hæmogenous variety occurs, with yellow discoloration of the skin and mucous membranes, and great increase of coloring-matter in the urine.

MODUS OPERANDI OF PHOSPHORUS POISONING.

In phosphorus poisoning, oxygen is abstracted from the blood-cells with such rapidity and to such extent that they are disorganized in great numbers, and this variety of jaundice with ecchymoses, hemorrhages, etc., supervene. In hemorrhagic malarial fever, we have the usual phenomena attendant upon rapid destruction of blood-cells and liberation of coloring matter. In cirrhosis of the liver, a disease in which this function which the liver has of separating the coloring-matter from dead corpuscles is interfered with by pressure upon the liver-cells and disturbed circulation, we may have some degree of jaundice and always have increase of coloring-matter in the urine.

With ordinary obstructive jaundice, which results from reabsorption of bile, we are not concerned in this paper.

THE COLORING MATTER OF THE BILE.

The coloring-matter of bile exists in two conditions, bilirubin and biliverdin, the red and the green matter of bile. The difference between them is one of hydration and oxygenation, biliverdin being derived from bilirubin by the assumption of a molecule of water and an extra atom of oxygen; bilirubin from biliverdin by reversing the process.

Bilirubin $C_4H_8N_2O_5 + H_2O + O = C_4H_8N_2O_6$
Biliverdin
 Experiments have shown that bile drawn directly from the bile-ducts during digestion is green, though reddish-brown when drawn from the gall bladder. If reddish-brown bile be shaken up with air, or exposed to the action of an oxidizing agent as nitric acid or iodine, its color changes to green. Then if oxygen be excluded by placing it in a bottle and corking tightly, the green changes to reddish-brown again. Bilirubin pre-exists in the worn-out and dead corpuscles from which it is extracted by the liver, undergoing, however, an immediate conversion into biliverdin while digestion and absorption are in progress. The coloring-matter of bile, in its two conditions of bilirubin and biliverdin, occupies a place midway in the scale between the red coloring-matter of blood and the green coloring-matter of plants, and

performs functions related to that of each, taking part in the vegetative processes of nutrition on the one hand, and the oxidations of animal life on the other.

DIGESTIVE FUNCTION OF THE LIVER.

Glucose, $C_6H_{12}O_6$, the product of the digestion of starch and saccharine substances is absorbed from the intestine by the radicles of the portal vein and conveyed to the liver where it is deposited in the form of glycogen or liver-starch $C_6H_{10}O_5$, to be again given off in the form of glucose as required for the needs of the system. In the process of being deposited in the liver, glucose undergoes a dehydration into glycogen; in the process of being given off, glycogen undergoes a hydration into glucose.

It is also known that albuminose, the product of the digestion of the albuminous elements of the food, undergoes a reduction in the liver into blood albumin, losing an atom of oxygen. The dehydration of glucose into glycogen and the deoxidation of albuminose into blood albumin are accomplished by the presence of bilirubin which, at the instant of its extraction from the dead corpuscles, undergoes a conversion into biliverdin, appropriating a molecule of water from the glucose and an atom of oxygen from the albuminose. The liver-cells by a selective action upon the glucose and albuminose of the portal vein upon the one hand, and the coloring matter of worn-out corpuscles upon the other, brings these substances into intimate relation with each other, effecting the interchange between them of water and oxygen, converting glucose into glycogen, albuminose into blood albumin, bilirubin into biliverdin.

During the intervals of digestion, quite a different circle of events takes place. During digestion, the blood is receiving more glucose from the intestine than is required for the needs of the system, and there is a surplus which is reduced to the form of glycogen, as we have seen, and stored in the liver for future use. Soon after absorption is completed, however, the liver completes its work of reducing glucose to glycogen, and begins instead to give off its glycogen as glucose. Whereas, in the first place, some agency was required to reduce glucose to glycogen, we now need some means to raise glycogen to glucose. This means is supplied again by the accommodating coloring matter.* There is abundant evidence that the bile continues to be secreted during the intervals of digestion, that it is always present in the intestine, that it is of a reddish-brown color, its coloring matter being in the condition of bilirubin, and that it is, for the most part, reabsorbed.

BILIRUBIN AND BILIVERDIN.

Under the changed condition of things, the bile continuing to find its way into the empty intestine, is absorbed into the portal and its bilirubin by the assumption of oxygen from the red corpuscles and water from the plasma of the blood, undergoes a con-

* The liver's work of breaking up dead corpuscles goes on, notwithstanding the necessity as well as the condition for forming green bile have ceased.

version into biliverdin. This biliverdin, when it re-enters the liver comes in contact with the glycogen and yields up to it its water, becoming reconverted into bilirubin and reconverting the glycogen into glucose, thus rendering it again diffusible when it is swept off into circulation. The atom of oxygen associated with the molecule of water in the biliverdin and liberated with it, is no doubt applied to the final oxidation of nitrogenous substances which have served their ends in the economy, of which reaction the urea found in the liver is the product.

The liver may be regarded as a chemico-vital laboratory in which certain elements of the food are prepared for assimilation, while other substances which have yielded up their capacity for meeting the demands of structure and function, are prepared for elimination. In this laboratory the reagent effecting the changes is the coloring matter, acting under the same conditions of heat and oxygen supply which are necessary for the activity of other allied substances above and before it in the scale.

Bibliography.

LES PRODUITS CHIMIQUES EMPLOYÉS EN MÉDECINE CHIMIE ANALYTIQUE ET INDUSTRIELLE. (Série grasse et série aromatique). Par Auguste Trillat, expert chimiste au Tribunal civil la Seine. Introduction par P. Schutzenberger membre de l'Institut. Professeur au Collège de France, aux 57 figures intercalées dans le texte. Paris: Librairie: J. B. Baillière et fils, 19 Rue Hautefeuille, près du boulevard Saint Germain, 1894.*

During recent years progress in the field of organic chemistry has been rapid and well maintained. One new discovery has followed another in succession so rapid that many have found it difficult or altogether impossible to keep pace with the newer developments. The value therefore of a work which gives in clear and concise form definite information concerning the newer chemicals can be readily estimated. It is evident that the present volume was not written for pharmacists alone and it will be found alike useful to physicians, analytical chemists and others interested in chemistry or the allied sciences.

The chapter on antiseptics and their classification gives a comparative account of the value of the antiseptic substances in general use by surgeons, bacteriologists and other specialists. The chemical constitution and physiological properties of each substance are given and the classification is in all respects a rational one.

The newer medicinal synthetics are described and an account is given of their chemical constitution, mode of preparation, physiological properties, solubilities, etc. The illustrations are a feature of marked merit. The figures are clear and easily comprehended, those referring to the different methods of producing ether being particularly interesting. A two-page plate in the opening pages conveys a fair idea of the modern chemical laboratory.

*The chemical substances, (fatty and aromatic series) employed in medicine, analytical chemistry and the arts by Auguste Trillat, with an introduction by P. Schutzenberger. With 57 illustrations inserted with the text. Paris: J. B. Baillière & Sons, publishers, 19 Rue Hautefeuille, 1894.

MATERIA MEDICA, PHARMACOLOGY, AND THERAPEUTICS—INORGANIC SUBSTANCES. By Charles D. F. Phillips, M.D., LL.D., F.R.S. (Edin.). Pp. xlv, 1 to 898. ssis. London: J. and A. Churchill.

As will be noted from the title, this work is devoted entirely to a consideration of the materia medica pharmacology and therapeutics of inorganic substances. It is a new edition of a work which was published under the same title in 1882, and has been out of print for some years. The classification and alphabetical arrangement observed throughout the work are worthy of special praise. Alphabetical order has been the main principle followed, though departures from this rule are to be noted in different divisions; thus we find the gases and non-metallic elements first, then the halogens (iodine first), then water in its various modes of use, and afterwards the acids before the metals; of these last, the order is that of their Latin names, though the heading of the pages is in English.

The chapter on Medicated Waters appears to us to be of paramount usefulness. It gives a detailed account of the principal European spas and mineral waters, together with notes on "Moor baths," "mud baths" and "sand baths," as well as their therapeutic indications. We print a selection from this chapter on another page and in this connection cannot help expressing regret that the author failed to extend his observations to the spas of the United States, many of which are held in high favor by American physicians.

To the descriptions of therapeutic agents is appended a very accurate list of the average and maximum doses of each. This is, of course, a common feature of works of the character of the one under review, but it is seldom we can speak with so much confidence of its value. Physicians and pharmacists will find this part of the work particularly useful.

ANALYSES OF TWELVE THOUSAND PRESCRIPTIONS. Compiled by W. Martindale, F.C.S. London: H. K. Lewis, Gower street.

This compilation is interesting as giving an alphabetical list (in the order of frequency) of the drugs or pharmaceutical products dispensed at such centers in the United Kingdom as Aberdeen, Bournemouth, Carlisle, Cork, London and Oxford. The figures given are expected to be of value to the revisers of the next pharmacopœia in deciding on future inclusions and dismissals.

It may be of interest to note that Professor E. L. Patch, of Boston, has prepared a similar list working, however, on different lines. He has examined 3,726 prescriptions to learn how many remedies were used five or more times in that number, and presented the results to the Massachusetts Pharmaceutical Association, in a paper entitled "The Prescription's Contents." In Patch's list quinine sulphate and morphine sulphate head the list with 292 to the former and 172 to the latter. There are many points of difference between the two lists to which we may revert when the occasion offers.

Proceedings of the Thirteenth Annual Meeting of the Alabama Pharmaceutical Association held at Anniston, May 8th and 9th, 1894. Published by the Association.

The Alabama Pharmaceutical Association convened in annual session this

year at Anniston, May 8—9, and the "Proceedings" have recently been distributed in neat pamphlet form to the members and the pharmaceutical press. From this publication it can be learned that the attendance of members was not up to the usual number, only 15 being present out of a total membership of 175. This would seem to indicate either a lack of interest in the affairs of the association on the part of the members or a failure on the part of the committee of arrangements to properly advertise the meeting. The proceedings included the reading of several scientific papers of value, the paper of A. T. K. Barber, of Birmingham, on "The Laws of Chemical Combination," and that of Wm. B. Parker on "Chemical Urinary Analysis" being especially useful. The last mentioned paper appeared in the AMERICAN DRUGGIST of June 28, page 341. The pharmacists of Alabama should take a deeper interest in the proceedings of their State organization. Payment of the annual dues is not sufficient; the officers deserve greater consideration and encouragement and this can be best given by contributing to a large attendance at the annual meetings.

Correspondence.

Trade Marks on Medicinal Articles.

Editor AMERICAN DRUGGIST:

Mr. Redsecker read a remarkable paper before the Pennsylvania Pharmaceutical Association meeting. His proposition to kill the trade mark monster by national legislation I heartily endorse. Mr. Redsecker is quite right about other civilized countries not granting trade marks on chemicals used in the healing art, but he might have added that while other nations do grant patents on process of manufacture, no other civilized country grants a patent on a name or a chemical itself; in other words if you have a patent on making sulphonal you may patent your process, but if I discover a new process I may go on and manufacture sulphonal, and the public who pays may take his choice.

Mr. Redsecker's second proposition to force patent medicine makers to publish the formula on the label is not new, but what is new in his proposition is not good. Redsecker's proposed bill also asks Ayers and Hood to publish their formula, but Tom, Dick and Harry, retail pharmacists, may make up their nostrums, and if they do not sell more than 500 dollars worth a year they need not publish formula. In this Redsecker makes a fatal mistake.

Are retail pharmacists to keep separate accounts of sales of their own cures, or blood purifiers? Is \$500 to be a retail limit or a jobber's limit? If Ayer's and Hood's sarsaparilla are patent medicines, why not Redsecker's sarsaparilla; and if the former are to publish their formula why not the latter?

As I have often pointed out if it is possible to unite the retail trade, any of the many plans will do the job. But

here lies the rub. If the manufacturers are in dead earnest to stop cutting they can do it; but there lies another rub, and the third rub comes when you tackle the jobber.

I am strengthened in my belief by the firm course pursued by manufacturers of pharmaceutical preparations. Parke, Davis & Co. are firm in their discount to jobbers, firm in their discount to retailers, and the difference guarantees a handsome margin to jobbers. Do we ever hear of their goods being cut? They do not budge on their discounts—stand on their dignity and merits—and—it works!

W. BODEMANN.

CHICAGO, July 4, 1894.

On "Fake Formulas."

Editor AMERICAN DRUGGIST:

DEAR SIR: Allow me to congratulate you on your editorial in regard to books on soda formulas. I have been in hopes that something would be said on subjects of this kind. In the spring I prepared an article on Soda Water and Soda Syrups, but when I got hold of Guide I laid my MS. away; for in the book I found absolutely nothing new. Only such remarkable advice as to charge fountains up to 150 lb. pressure; and to use tincture of soap-bark for a foam. Also a formula for Lemon Syrup made by adding oil of lemon and citric acid to syrup and coloring with tincture of curcuma; also the further advice that L. & B. had the finest oil lemon; that it was worth \$9 per lb., etc., but was so much finer than any other oil-lemon that it was worth the difference in price. After reading this extraordinary book I came to the conclusion that I wasn't in it in soda water, although my formulas were the work of years of experience at the fountain, so I quietly laid it aside. You have done the public a service.

FRANK EDEL.

Des Moines, Ia.

Adhatoda Vasica.

Editor AMERICAN DRUGGIST:

On page 20 of your issue of July 10 of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, we notice under the head of "Queries and Answers" that a correspondent, Mr. L. L. C., writes you for information on *Adhatoda vasica*, which he states "is said to be obtainable from Parke, Davis & Co., though I find no mention of it in their catalogue." Your correspondent will find on page 10 of the catalogue, which is the first page of our list of fluid extracts, this preparation listed under the name of *Adhatoda vasica*, and also on page 214, will notice the reference No. 6.

We also call your attention to a slight inaccuracy regarding the information which you append in reply to his questions. You state that the name of the plant is *Justicia adhatoda*, Lin.; but that is only a synonym, the proper name being *Adhatoda vasica*, Nees. You also state that it is of the natural order, *Justiciæ*. This also is an old name, but is now relegated to the list of synonyms, the name of the natural order at present being known as *Acanthaceæ*.

PARKE, DAVIS & CO.

DETROIT, MICH., July 18.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Incompatible Prescriptions.—A. H. B., writes:—"Why is this prescription incompatible?—it deposits a flaky substance.

Codeine sulph. grs. iv.
Aque chloroform. 3 iss.
Aque lauro cerasi. 3 iv.
Syr. verba santa aromatic. 3 i

My reason is the K O H solution in the syrup neutralizes the sulphuric acid radical of the codeine, and alkaloidal codeine is precipitated. Am I correct?"

It was suggested to acidulate the flaky solution but this defeated our object as regards to syrup verba santa aromatic, which is clarified by use of an alkali. Am I not correct?

It is probable that the explanation given above is the correct one, though we have never experienced trouble of this kind in combining other alkaloidal salts with syrup verba santa. We would like to hear from others of our readers on this subject.

Dry Shampoo—E. A. S. writes: "Please insert a formula for 'Dry Shampoo,' something that may be profitably sold to barbers."

"Dry Shampoo" is a great misnomer. The preparation usually sold as such consists of

Ammonium carbonate. 1 dram.
Potassium carbonate. 2 drams.
Water. 5 ounces.
Alcohol. 5 ounces.
Bay rum. 30 ounces.

Dissolve the alkalies in the water and add the alcohol and rum.

The above is a type of the compounds styled "Dry Shampoos." Below we give a number of formulas from which a suitable one may be selected:

I.

Tinct. arnica. 1 dram
Tinct. cantharides. 2 drams
Water of ammonia. 4 drams
Alcohol. 8 fl. ounces
Soft water. 8 fl. ounces

II.

Aqua ammonia. 2 fl. ounces
Tinct. cantharides. 1 fl. ounce
Tinct. capsicum. 1 ounce.
Alcohol. 32 fl. ounces
Water. 32 ounces
Carbonate of potash. 1 ounce

III.

Ammonia carbonate. 4 drams
Borax. 1 ounce
Dissolve in water. 2 pints

Add

Glycerin. 2 ounces
New England rum. 6 pints
Bay rum. 2 pints

IV.

Alcohol. 8 fl. ounces
Water. 8 fl. ounces
Soap. 2 fl. ounces
Carbonate of potash. 4 drams
Oil of lavender. 20 minims
Tinct. quillaia. 2 fl. ounces

V.

Glycerin. 1 fl. ounce
Aqua ammonia. 2 fl. ounces
Alcohol. 16 fl. ounces
Water, q. s. to make. 32 fl. ounces

VI.

Carbonate of potash. 1/4 drams
Tinct. cantharides. 2 drams
Water of ammonia. 1/2 ounce
Bay rum. 1/4 ounces
Alcohol. 1/4 ounces
Water. 1/4 ounces

Neutral Muriate of Quinine.—F. E. writes:

"I see every now and then some extraordinary statements regarding the solubility of the neutral muriate of quinine; but no information as to how it is prepared; even the National Dispensatory speaks of it, but gives no formula for same. Will you kindly in some future issue of your journal give the chemical formula and also mode of preparing neutral muriate of quinine."

In a communication to the French Academy of Sciences (*Comptes Rendus* 1887), M. Clermont stated that the neutral muriate of quinine is soluble in its own weight of water. To make it, the author dissolves in distilled water one equivalent (548 gm.) of neutral sulphate of quinine, and mixes this with a solution of two equivalents (208 gm.) of dried chloride of barium. After separating the sulphate of barium, the liquor is evaporated (below 100°), leaving the solid neutral hydrochlorate of quinine. The solution of this salt is of course, bitter, but it is entirely free from any caustic quality, thus making it as desirable for hypodermic use as it is for delicate conditions of the stomach. Its chemical formula is $C_{20}H_{24}O_2$, H.Cl.

Aromatic Sy. up of Licorice.—R. B. T.—The formula which follows is said to afford a satisfactory syrup:

Fluid extract licorice. 4 fl. ounces
Fluid extract cedar. 60 minims
Fluid extract fennel. 30 minims
Fluid extract cardamom. 60 minims
Fluid extract anise. 30 minims
Sodium borate. 6 grains
Simple syrup q. s. 2 pints

Triturate the borax with the fluid extract of licorice until dissolved; add the remainder of the fluid extracts, mix and add syrup until the bulk measures two pints.

F. E. Cascara Sagrada Aromatic.—R. B. T.—Frank Edel is the author of the following formula which he says presents the cascara in a pleasant non-bitter form:

Grammes.
Cascara sagrada (No. 60 powder) 100.00
Calcined magnesia. 30.00
Water. 100.00

Mix thoroughly and allow to macerate for 12 hours; then add 100 Cc. of alcohol and percolate, continuing the percolation with dilute alcohol until 400 Cc. are received. Then with this percolate:

Grammes.
Barberry bark. 37.00
Coriander seed. 17.00
Licorice root. 2.00
Oil anise. 1.30
Oil orange. 1.30
Oil cinnamon. 1.00
Angelica root. 2.00

To the percolate obtained from this add enough dilute alcohol to make 400 Cc.; then add 400 Cc. water and 400 gm. sugar. Dissolve the sugar by agitation.

Sweetened Castor Oil.—R. B. T. writes: "Please give me a formula for 'sweet castor oil,' a preparation of castor oil with aromatic in which the taste of the oil is disguised, but dose about the same."

Sweetened castor oil is said to be prepared by thoroughly washing the oil with hot water and incorporating sufficient saccharine to impart a sweet taste. It is flavored by adding small quantities of oil of cinnamon and extract of vanilla.

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 15 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Queries. 74th series.

151. The bast cell has usually a thick soft and flexible or tough cell wall, which gives a cellulose reaction, the cavity contains abundance of protoplasmic substance with a number of minute starch granules. The bast cells constitute the phloem and differ somewhat according to the position they have in the cell structure, some bast cells also have what is called the sieve plate.

Wood cells have hard brittle cell walls, do not respond to cellulose reactions readily and the cavities are usually filled with air, and have no sieve plates.

Wood cells constitute the Xylem in dicotyledonous cell structure. These cells also differ in appearance according to the position they take.

152. The fibro-vascular bundles in a palm are scattered all though the stem and intermingled with parenchyma tissue; these fibro-vascular bundles are closed and form dots on a transverse section. The palm thus grows from the interior of the stem. This is characteristic of all monocotyledons. The oak has wedge-shaped open fibro-vascular bundles, the wood tissue forming regular each year in zones between the bast and old wood. This gives rise to the annular rings of di- or polycotyledons.

153. A mericarp is one portion or carpel of a cremocarp, the fruit of an umbelliferous plant.

154. A legume is a fruit consisting of a single two-valved pod or pericarp opening at both sutures, but bearing seeds only on one suture. Cassia fistula and taramind are both legumes.

155. A pepo is a kind of berry with a hard rind, the inner part being softer and containing the seeds. Colocynth is an official pepo.

156. A panicle is a flower cluster in which the flowers are borne from the peduncle on branched pedicels, the axillary flowers blossoming first, or a panicle is a raceme with branched pedicels. The panicle of

brayeria, anthelmintica is official in the U. S. P., 1890, and in the British Pharmacopoeia.

157. A berry is a juicy indehiscent fruit in which the seeds are immersed in a pulpy mass.

Official berries are: Fruit of capsicum fastigiatum, and the rind of recent fruit of citrus limonis, citrus vulgaris, and citrus aurantium.

158. A utricle is a dry indehiscent fruit, with a thin bladder like covering or pericarp, containing one seed. The fruit of chenopodium ambrosioides is an official utricle, U. S. P., 1890.

159. The characteristics of the fruit of umbelliferous plants are as follows, fruit consists of 2 dry carpels cohering by their inner surface these carpels are, each of them marked lengthwise with 5 primary ribs and often 5 secondary ones, between them are commonly lodged the oil tubes.

Example of official fruits are: Foeniculum capillaceum, carum carvi, pimpinella anisum, etc.

160. The milk juice of some plants is found or contained in the milk ducts, which form a network as it were mainly in the middle layer of bark, but milk tissue is also found in other parts of plants. The prepared milk juice of papaver somniferum, natural order, Papaveraceae, is official U. S. P., 1890, as is also the concrete juice of Lactuca virosa (Linné.)

Names of Students Whose Grade Stood 75 on the 14th Series.

E. Q. Ancwalt, Philadelphia.
James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. J. C. Boyer, Wisconsin, Pa. T. H. Brennan, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponstien, S. Dak. G. E. Barksdale, Richmond, Va.
Miss Maude Florence Cain, Lancaster, Pa.
J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centerville, Tenn.
H. J. Force, Newark, N. J.
William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.
Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.
A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada.
H. G. Lavalley, Gouverneur, N. Y.
C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centerville, Tenn.
W. B. Nethery, Toronto Junction, Ont.
Edward L. Page, Lancaster, Pa. J. H. Pratt, Birmingham, Ala. P. H. Peters, Henderson, Mich.
A. V. Rand, Wolfville, N. S.
Aber Y. Smith, Clarkburg, W. Va. Clarence O. Snavey, Lebanon, Pa. Moses W. Somers, Boston, Mass. W. E. Smuri, Parsons, Pa. W. A. Sichel, Snow Shoe, Pa. W. Scallin, Mitchell, S. Dak.
Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va.
W. H. Van Strander, Winsted, Conn.
Bertie Ward, Orange, N. J. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y. Miss Emma A. Wiggins, Exeter, N. H.

Questions; Second Series.

THERAPEUTICS.

11. What is meant by a sialagogue; name one.

12. Define abortifacient, name one and give the antidotes to abortifacients in general.

13. What is meant by anæsthetic; name two in frequent use.

14. What is an antihidrotic; name one.

15. What is the action and use of anti-phlogistics.

16. Name some drugs that act as carminatives and define the term.

17. Name some drugs that act as cholagogues and define the term.

18. Name some drugs that act as diaphoretics and define the term.

19. Name two drugs that act as diuretics and define the term.

20. Name two aperients and define the term.

Student's Column.

Organic Materia Medica of the U. S. P.

[Continued from Page 22.]

Cannabis Indica. Indian Cannabis; Indian hemp.

BOTANICAL NAME.....Cannabis Sativa.
NATURAL ORDER.....Urticaceae.
HABITAT.....East Indies.
CONSTITUENTS.....Volatile oil; several alkaloids (cannabin, etc.).
PROPERTIES.....Hypnotic, anodyne, antispasmodic.
PARTS USED.....The dried flowering tops of the female plant.

Dose—Ext. Gm. 0.16—0.5; Ext. fld. Cc. 0.03—0.06; Tinct. Cc. 1—2.

Cantharis. Cantharides; Spanish flies; blistering beetle.

ZOOLOGICAL NAME.....Cantharis vesicatoria.
ORDER.....Coleoptera—Class, Insecta.
HABITAT.....Native of Spain and Italy; collected chiefly in Russia, Hungary and China.
CONSTITUENTS.....Cantharidin (0.17—0.5); acetic, uric and formic acids, fatty matter.
PROPERTIES.....Internally, diuretic; externally, vesicant.
PARTS USED.....The whole insect, dried.

Dose Tinct. Cc. 0.30—1.30 Extern. app. Ceratum; Colloidium.

Capsicum. Cayenne pepper; African pepper.

BOTANICAL NAME.....Capsicum fastigiatum.
NATURAL ORDER.....Solanaceae.
HABITAT.....Indigenous to South and Central America, East and West Indies, Africa.
CONSTITUENTS.....Capsaicin, crystallizable body, soluble in alcohol, fixed oils and ether. Volatile oil; red fatty matter.
PROPERTIES.....Irritant and local stimulant.
PARTS USED.....The ripe fruit dried.

Dose—Ext. fld. Cc. 0.6—0.12 Oleoresin. Cc. 0.06 Tinct. Cc. 4—8, diluted.

Cardamomum. Cardamom.

BOTANICAL NAME.....Elettaria repera.
NATURAL ORDER.....Scitamineae.
HABITAT.....Mountains of the Malabar coast.
CONSTITUENTS.....Volatile oil, starch and coloring matter.
PROPERTIES.....Carminative and stomachic.
PARTS USED.....The fruit or seeds freed from the pericarp.

Dose—Tinct.—Cc. 4—8. Compound tincture Cc. 4—8.

Carum. Caraway seed.

BOTANICAL NAME.....Carum carvi.
NATURAL ORDER.....Umbelliferae.
HABITAT.....Western Himalayas and Caucasus; cultivated in Norway, Russia, Germany, Holland, England, Morocco and United States.
CONSTITUENTS.....Volatile oil, green fixed oil; small portions of tannin.
PROPERTIES.....Carminative, aromatic stimulant.
PARTS USED.....The dried fruit.

Dose—Ingredient in Tinct. Card. Co. Oil Cc. 0.03—0.06.

Caryophyllus. Cloves.

BOTANICAL NAME.....Eugenia aromatica.
NATURAL ORDER.....Myrtaceae.
HABITAT.....Many islands of Indian Ocean, tropical Africa, Brazil and West Indies.
CONSTITUENTS.....Volatile oil, tannin, gum and extractive. According to L. C. Pettit, oil contains 75 per cent. Eugenol.
PROPERTIES.....Aromatic stimulant and stomachic.
PARTS USED.....The unexpanded flowers.

Dose—Ingredient in Tinct. lavand. Co. Oil Cc. 0.10—0.30. Seldom employed internally.

Cascarilla. Cascarrilla bark.

BOTANICAL NAME.....Croton Eluteria.
NATURAL ORDER.....Euphorbiaceae.
HABITAT.....Bahama Islands.
CONSTITUENTS.....Volatile oil, active principle—cascarillin; tannin, starch and albumen.
PROPERTIES.....Aromatic stomachic bitter.
PARTS USED.....The dried bark.

Dose—No preparation official. Powd. Gm. s.

Cassia Fistula. Purging cassia; cassia pulp.

BOTANICAL NAME.....Cassia Fistula.
NATURAL ORDER.....Leguminosae.
HABITAT.....East and West Indies.
CONSTITUENTS.....Sugar, mucilage, pectin, salts, etc.
PROPERTIES.....Laxative in small—purgative in large doses.
PARTS USED.....The pods.

Dose—In confection semina Gm. 4—8.

Castanea. Chestnut.

BOTANICAL NAME.....Castanea dentata.
NATURAL ORDER.....Capuliferae.
HABITAT.....Western Asia, United States from Maine to Michigan southwards.
CONSTITUENTS.....Usual constituent of leaves; tannin 9 per cent.
PROPERTIES.....Respiratory sedative; febrifuge.
PARTS USED.....The leaves.

Dose—Ex. fld. Cc. 4—8.

Catechu. Catechu.

BOTANICAL NAME.....Acacia catechu.
NATURAL ORDER.....Leguminosae.
HABITAT.....East Indies and Ceylon; naturalized in Jamaica.
CONSTITUENTS.....Catechu-tannic acid; catechin (C₁₅H₁₀O₆).
PROPERTIES.....Powerful astringent in diarrhoea.
PARTS USED.....The extract from the wood.

Dose—Tinct. Comp. Cc. 3—8. Trochiscel 1—4.

Caulophyllum. Caulophyllum; blue cohosh.

BOTANICAL NAME.....Caulophyllum thalictroides.
NATURAL ORDER.....Berberidaceae.
HABITAT.....United States and Canada.
CONSTITUENTS.....Alkaloid — caulophylline, isolated by Lloyd. Saponin; Resins.
PROPERTIES.....Antispasmodic; demulcent, diuretic.
PARTS USED.....The rhizome and roots.

Dose—No preparation official.

Cetaceum. Spermaceti.

ZOOLOGICAL NAME.....Obtained from Physeter.
ORDER.....Cetacea — macrocephalus, class mammalia.
HABITAT.....Pacific and Indian Oceans and China Sea.
CONSTITUENTS.....Cetin consisting chiefly of cetyl palmitate (C₁₈H₃₇, C₁₆H₃₃O₂) contains small quantities of myristic, lauric and stearic acids.
PROPERTIES.....Lenitive and protective.
PARTS USED.....The nearly pure cetin from the head of the sperm whale.

Dose—Powd. Gm. 0.5—0.150.

Cetraria. Cetraria; Iceland moss.

BOTANICAL NAME.....Cetraria islandica.
NATURAL ORDER.....Lichenes.
HABITAT.....North America, southward to the mountains of North Carolina; Iceland.
CONSTITUENTS.....Lichen starch, lichen stearic acid, bitter principle, cetrarin.
PROPERTIES.....Nutritious, demulcent and tonic.

PARTS USED.....The entire lichen.

Dose—Decoctum. Cc. 30—130.

Chelidonium. Chelidonium; Celandine.

BOTANICAL NAME.....Chelidonium Majus.
NATURAL ORDER.....Papaveraceae.
HABITAT.....Europe.
CONSTITUENTS.....Several alkaloids—chelidone (C₁₇H₁₇N₃O₂), Chelerythrine, α and β—chelidonine and protopine.
PROPERTIES.....Narcotic and local irritant; hepatic stimulant.
PARTS USED.....The entire plant.

Dose—Fresh juice Cc. 3—3.

Chenopodium. Chenopodium; American wormseed.

BOTANICAL NAME.....Chenopodium ambrosioides and variety, anthelminticum.
NATURAL ORDER.....Chenopodiaceae.
HABITAT.....North America.
CONSTITUENTS.....Volatile oil.
PROPERTIES.....Anthelmintic.
PARTS USED.....The fruit.

Dose—Oil Cc. 0.3—0.60.

(To be Continued.)

Business.

Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.

Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.

*Written for the
American Druggist and Pharmaceutical Record.*

CIRCULATING CIRCULARS.

THE USELESSNESS OF THE CONVENTIONAL
FLYER—SOME PRACTICAL IDEAS ON
THE WRITING AND DISTRIBUTION
OF CIRCULARS.

BY NATHANIEL C. FOWLER, JR.

All men who circulate circulars are not fools, but every fool circulates circulars.

The center of all advertising is the regular advertisement in the regular periodical.

NOTICE.

The undersigned begs to announce that he has just received a fine assortment of toilet soap, hair and tooth brushes, manicure sets, perfumes and other fancy toilet articles. Good goods at low prices. Please give me a call.

JOHN SMITH
44 SMITH AVE.

THE CONVENTIONAL FORM OF CIRCULAR.

The men who have built up business without the use of periodical advertising can be counted on the fingers of one hand, exclusive of the thumb.

It is safer to follow the rule of success than the law of exception.

Because one man by peculiarly constructed ability, coupled with the unusual luck and an almost unconscious grasping of opportunities, has made success along any particular line, does not prove that you and I and others can duplicate his success.

There are certain fundamental principles of debit and credit, of buying and selling, of store management, of regulation of prices, and of advertising, and he

who would be successful must follow standard rules more than run in the road of any unproven-to-be-successful originality.

There is as much danger in over-originality as in under-originality.

Brains may be but varnish thick.

That which looks well on the outside may be rotten on the inside.

Fundamental principles owe their origin to the trunk, not to the bark of the tree.

Without the healthy inside the outside can only look healthy, and is not likely to look so long.

The cheaper class of merchants and others who depend entirely upon transient trade, and whose success is even more transient than their business, generally adopt the flyer or circular as the bringer-in of trade.

They do so because the first cost is less than that of the newspaper advertisement, and because they imagine that by controlling the circulation of their own individual medium, they reach the people as they want to reach them.

They simply fool themselves.

Do not think I believe there is no value in the dodger, the flyer, and the circular, because there is.

Every product of the printing press can be used to advantage.

The forceps that are all right for pulling teeth may not be suited for the unscrewing of a nut on a carriage axle.

In the adoption of the method is the success of it.

The flyer which is distributed from house to house is worth a little less than the cost of the white paper, unless such flyer is inclosed in an envelope, personally directed and delivered by a trustworthy carrier.

Millions of dollars have been thrown away in the production and distribution of circulars; some of them printed in gilt upon coated paper, when the same amount of money expended in the newspaper advertisement would have brought permanent as well as transient business.

Wholesalers, and the majority of retailers are obliged to issue descriptive catalogues and price lists, but to these I am not referring.

I simply have reference to the so-called dodger or flyer which is distributed upon the street or thrown upon the doorsteps.

A circus can use flyers to advantage, for everybody is interested in a circus, principally because it comes but once a year, and the mere mention of a circus attracts attention; but the success of a circus is of a transient sort, transient in each particular town.

If the business man is going to carry his goods in a cart, and can burn enough red fire around the cart to make himself as prominent as a Barnum, then he can use circulars and exaggerated statements to advantage, but the majority of business men prefer to stay in the same store, on the same street as long as they can.

Ninety-nine per cent. of the flyers contain from one to twenty-five times too much matter.

Does the merchant ever read circulars of other concerns?

Does his wife pay any attention to the bills handed her at the door?

If he doesn't notice other people's circulars, if his wife pays no attention to them, why should he expect others to read his circulars?

Because a circular reads well to the

merchant, to his wife and to his doctor and minister, is no reason that the circular will read well to those to whom it is sent.

The question is, will the people who can be made to become buyers read the circular?

If they will, send them out, send out a million, send out any number, but don't send them out unless you are reasonably sure of returns, and even then, the circular advertisement, except for the cheapest stores on the cheapest street in the cheapest towns, will never bring adequate return.

The annexed presents, in reduced form, a conventional circular. It does not well illustrate it, because the space does not permit of sufficient matter, but the selection of type and the crowding together of sentences are fairly correct, and no worse than in 90 per cent. of the circulars distributed in any town.

In the first place, the word "notice" has no place in business economy. It is all right upon the announcements of railroads and express companies, but it never should be used in announcing any line of goods. The firm name at the bottom is in type at least about four times too large. The golden rule for advertising is to advertise the goods for sale—not the man who sells them. So many articles are offered that the merchant has produced a conglomeration which will not be read by anybody.

The following is calculated to present an effective circular. It has no heading, largely because the majority of circulars have headings.

I have 200 of the best
25-cent hair brushes I
ever had, and there
won't be any left day
after to-morrow.

JOHN SMITH,
44 Smith Ave., SMITHVILLE.

THE CORRECT FORM OF CIRCULAR.

The above presents a clean, definite statement, one that will be read and appreciated.

Must Advertise.

A man may guy,
And a man may lie,
And a man may puff and blow;
But he can't get trade
By sitting in the shade,
Waiting for business to grow.—*Ex.*

A Broad Ripple farmer posted the following on his grounds: "Any person ketched on these grounds, or cows or other animals or wimmen will git into trouble."—*Indiana Medical Epitomist.*

NEW YORK.

NEW YORK, July 24.—Much interest has been manifested among physicians and pharmacists as well as by the daily press in the facts concerning the publication of the statement that Eugene V. Debs, the head of the striking railroad men, had been a dipsomaniac under the care of Dr. T. S. Robertson. The *New York Herald*, *The Tribune*, *The Evening Telegram*, and, in fact, nearly all the leading dailies, took up the matter, publishing the comments of the AMERICAN DRUGGIST, and also those of some leading physicians. The interest in the matter was not local, for newspapers from various larger cities took up the matter in the same strain. Among the more interesting communications received on the subject is one from the psychic philosopher, Citizen George Frances Train, who sent us the following addressed in blue and red pencil:

To Citizen Editor AMERICAN DRUGGIST.
Enclose wiregram from citizen Debs, to whom I sent your A. P. article on Robertson. Type it. Ask forty thousand professional men if they approve.
GEO. FRANCIS TRAIN.

A QUEER SWINDLE.

Druggists all over the country have received a printed postal card as follows:

NEW YORK, June 2, 1894.
No. 34 Church street.

Dear Sir: In purifying sulphuric acid large quantities of arsenic sulphide are obtained as waste. For the last two seasons I have placed this upon the market as an equal of paris green with great success. It not only kills potato bugs, but rats, mice, roaches, etc. In color it is made similar to paris green. I put it up in barrels of 300 pounds and sell to the trade at one cent per pound. A sample keg of 50 pounds, with advertising matter, will be sent express paid for \$1.

Respectfully yours,
WM. CLARK, Chemist.

Several complain that they have sent money and orders to Clark, but never have received any reply. It has also been pointed out that the express charges on a fifty-pound keg to many parts of the country would exceed the amount charged for the package, which Clark offers to send free.

Clark, the advertiser, rents a letter-box of Charles Peters, at No. 84 Church street, and is described as a middle-aged man. Nothing is known about him at Mr. Peter's store further than that he paid for the letter box and used to call about three times a week. From six to a dozen letters used to arrive for him every week. These came from druggists all over the country. The postal authorities are looking for a chance to stop his mail.

TEMPERANCE DRINKS.

The drug stores are cutting heavily into saloons in the sale of soft drinks. This is due not only to the great difference in price, but to the prompt service in drug stores and the far better quality of the drinks they serve. In the vicinity of Madison square there are four or five drug stores which employ bartenders to look after their fountains. A soda lemonade, which is a popular drink in hot weather, costs 25 and 35 cents in the expensive cafés and bars up town. The apparatus for squeezing the lemons is not always modern in the bar rooms, the sugar is often left in the bottom of the glass, and at times the club soda is flat from bad corkage or other causes. In the drug stores the attendants use limes or a superior quality of lemons, serve the lemonade in long and very thin glasses which lie packed in ice on the counter, and the charge is only 10 cents. Viewed from a critical standpoint the drug store lemonade is a superior article to the lemonade of the saloon, and the prices appeal to customers in these times. There are, in

addition to lemonade, a great number of other drinks, from calisaya cocktails to frozen absinthe, which can be had at the drug store fountain.

A MAN OF SORROWS.

Fortune seemed to smile on C. G. Tomlinson one month ago. He was happily married, was one of the most prosperous druggists on the upper West Side of the city, had many customers and friends, whom he had won by his genial disposition and his careful attention to business. His oldest son was a graduate of the College of Pharmacy, and helped his father in the store. It was intended ultimately that he should be given a partnership in the business. The store is a large and well-stocked one, at the corner of Columbus avenue and 102d street. But about three weeks ago, Mr. Tomlinson suddenly took sick and died. Scarcely had the father been laid away to rest when death came to the youngest daughter, Hattie, aged ten, in a startling and horrible manner. She was sitting in the front yard the night of the Fourth, watching the boys play with crackers and other fireworks, when one of the inflammable articles set her clothes on fire, and the child was burned so dreadfully that she died a day or two after. This double affliction so affected the widow that, for a time, her reason was despaired of. She is now able to be about and attend to her business affairs.

FUNERAL OF WM. H. HALL.

The funeral of the late Wm. Henry Hall, whose death at Buda Pesth was recorded in our last issue, was held at the Fifth Avenue Presbyterian Church on Saturday the 21st, and the following institutions were represented by parties whose names are attached:

Washington Trust Co.—Charles F. Clark, George H. Prentiss, Joel F. Freeman, L. K. Wilmerding and J. F. Anderson, Jr. Drug Section New York Board of Trade and Transportation—Geo. Clinton McKesson, of McKesson & Robbins; Wm. Ritchey, of Bruen, Ritchey & Co.; Fred M. Robinson, of R. W. Robinson & Son; Orlando H. Jadwin; John H. Stallman, of Stallman & Fulton; and Thos. P. Cook, of the New York Quinine & Chemical College of Pharmacy of the City of New York, Samuel W. Fairchild, Horatio N. Fraser, N. Niven Hegeman, Thos. F. Main, T. J. Macmahon and Reuben R. Smith. Association of Manufacturers and Dealers in Proprietary Articles—Brent Good, A. H. Kennedy, Thomas Leeming, Alfred Henry Mason, and Chas. H. Fletcher.

MINOR NEWS NOTES.

Fred. H. Plate has purchased the Thompson drug store at Flushing, L. I.

Geo. Hubacheck has opened a branch store at Second avenue and 74th street.

Korndoerfer at second avenue near Houston street has sold out to Behn & Steckman.

M. Doherty, of the Duval Rubber Co., Boston, was among the visitors to New York last week.

J. Fred. Doty, of the Atlas Rubber Company, New York, is spending the summer at Manhattan Beach.

The West Shore Pharmacy, at 42d street and Ninth avenue, has changed hands again, this time to J. Schulkind.

The Bayport Pharmacy, Bayport, L. I., formerly owned by F. Bignes has passed into the hands of C. Edward Slosson.

Elmer Foster, of the Dean Foster Co., Boston, is spending a few days at Asbury

Park. He is stopping at the Imperial Hotel.

Henry Koopman, the manager of the Spanish department of McKesson & Robbins has left the city for a two months' tour through Italy.

The Vollman Sponge Company, formerly of 16 Platt street, are now located at 522 Broadway, where they are prepared to supply all varieties of sponges.

John Webster, of Fox, Fultz & Webster, druggists' sundries men, Boston and New York, is in New York City looking after the affairs of the branch here.

A daughter of Chas. G. Tomlinson, whose death was recorded in our last issue, has recently died from the effects of burns received on Independence Day.

Herbert D. Robbins, of McKesson & Robbins, returned from Paris on Saturday last after a six weeks' vacation spent there and elsewhere on the continent of Europe.

The Huron Rubber Co. of Cleveland, O., has been purchased by the Atlas Rubber Co. of New York, and Eugene Herbert, of the latter firm has been placed in charge.

An order has been received by a New York drug broker for Haarlem oil for Canton, China, the same to go through by express, presumably for use in the plague.

Lehn & Fink, the publishers of *Notes on New Remedies*, have decided to change the periodical from a monthly to a quarterly, and the paper will only appear four times a year hereafter.

The summer cottage at Eastport, L. I., of Franklin B. Crouch, a druggist at 203 Grand street, New York, narrowly escaped destruction by a supposed incendiary fire recently. The loss is about \$5,000.

While alighting from a street car near his home on Saturday last, Gustavus Michaelis, a well-known Rochester pharmacist, fell and nearly bit his tongue in two. Eight stitches were put in it by a local surgeon.

Joe S. Blitz who covers the ground for Lehn & Fink in the States of Ohio, Indiana, Kentucky and other points West is spending his vacation in the vicinity of New York City. Joe is a favorite among the trade West.

The National Sponge & Chamois Co. of Key West, Nassau and Trieste, have opened offices at 99 Fulton street and 142 William street, this city. The firm will do an import and export business in sponges and chamois.

L. S. Eickwort, of 712 Tremont avenue, New York, has purchased the old establishment at the corner of Water and Fulton streets, New York, of the estate of S. A. Brown. The firm will conduct their business under the name of the S. A. Brown Pharmacy.

The wholesale drug trade of New York sent individual requests to senators and congressmen at Washington for their support in behalf of Senator Hoar's amendment to the tariff bill referring to repayment of the revenue tax on alcohol used in the arts and for medical preparations.

A Maltese cat met a tramp feline in the wholesale drug house of Skinner & Milligan, 60 Fulton street, one night recently. In the fierce battle that ensued the cats hopped around the shelves and succeeded in overturning several bottles of some sort of acid. Instantly a dense mass of smoke arose, which a passerby saw. He sent in an alarm. Damage, \$5. The cat fight was a draw.

Among those who sailed recently for Europe were Francis E. Dodge of Dodge & Olcott and Sturgis Coffin of Ladd & Coffin, New York.

Bloomington asylum, one of the best known private institutions for the care of the insane in the United States, is to be removed from its present location at 117th street, this city, to White Plains in Westchester County, a few miles north of the city limits. The old name of the asylum will be retained.

Wm. J. Quencer, the well known proprietor of Quencer's Pharmacy, 57th street and Ninth avenue, was absent from his place of business for several days last week on account of sickness. Mr. Quencer is a townsman of his excellency Governor Flower, both hailing from Watertown, Jefferson County.

An old man with a head as destitute of hair as a watermelon, entered a Weehawken drug store and told the clerk he wanted a bottle of hair restorer. "What kind of hair restorer do you prefer?" "I reckon I'll have to take a bottle of red hair restorer. That was the color it used to be when I was a boy."

A pharmacy graduate of 1881 sends this request to the *New York Recorder*, which the editor says will be complied with: "The *Recorder* Fool Killer should attend to the man who gives a druggist a prescription to put up, and then constantly talks to him while it is being compounded; especially that kind of people who say, 'Please make no mistake; it is for myself.'"

At a special meeting of the King's County Pharmaceutical Society, held in the Brooklyn College Building, Tuesday, July 17, for the purpose of filling vacancies on the King's County Board of Pharmacy, the following members were chosen, viz.: Wm. M. Davis, Donald M. Cameron. The King's County Medical Society appointees are Dr. Elias H. Bartley and Dr. Wm. Hutchinson.

The Farr & Brightman Company, of Saratoga Springs has been incorporated with the secretary of state, with a capital of \$9,000. The company will deal in flavoring extracts, perfumery, toilet preparations, syrups, drugs and medicines. The directors are Fred J. Farr, Frank M. Adee, Frederick S. Harlow, William H. Brightman of Saratoga Springs, and Henry T. Brightman of Mayville.

F. R. Arnold & Co., proprietors of "Lantiers' Bouquet Columbia" and other fashionable perfumes, startled their neighbors in Murray street the other day by blossoming forth with a bright scarlet announcement of their specialties so placed as to be seen by the passengers on the elevated railroad. The specialties thus brought into prominence include "Lilac Blooms" perfume "May Bells" soap and "May Bells" perfume.

Jno. F. Low, treasurer of the Low Art Tile Co., Chelsea and Boston, was in this city last week and was accompanied by his father. Mr. Low is one of the few business men who can view with equanimity, the movement ascensive of the mercury on the thermometric scale; for therein lies thirstiness and in thirst and the quenching thereof is business for the soda fountain manufacturers of whom Mr. Low is one, and a great one.

Nearly all of the members of troop A, the crack city cavalry, are horse fanciers of considerable discrimination, and one of the most enthusiastic horsemen in the troop is C. Graham Bacon, head of the wholesale drug firm of C. G. Bacon & Co.

Mr. Bacon's love of horses, however, extends to driving as well as riding horses, and he evidences this by his devotion to his fine tandem team behind which he can be seen in the park on almost any fine morning.

Among prominent out of town members of the wholesale drug, chemical and related trades who are at present sojourning in New York City are Edward Mallinckrodt, president of the Mallinckrodt Chemical Works, St. Louis; A. M. Todd, the peppermint grower of Kalamazoo, Mich.; C. A. Mensing, of Mensing & McCullough, Galveston, Texas; Peter Lance, of Wm. R. Warner & Co., Philadelphia; and Henry J. Heister, of Geo. Lueders & Co., New York and Chicago.

The German Apothecaries' Association have adopted the plan of taking occasional botanical excursions into the surrounding country. On June 21, the members repaired in a body to Englewood, N. J., where they called on a brother member, E. A. Platt and received hospitable entertainment. Dr. Smith Ely Jelliffe was of the party and on the walk to Fort Lee made a fine collection of botanical specimens. On Sunday July 8, the association spent the day botanizing, etc., at Spring Lake, Staten Island.

Kuehn & Lubbers, the New York agents for E. L. Patch & Co., Boston, are distributing free of charge, copies of the "Question Box," "Trouble and Loss in Storing Stock" and "The Prescription's Contents," three valuable and interesting papers read by Professor Patch before the Massachusetts Pharmaceutical Association at the Worcester Convention on June 26. As copies can be had for the asking, every druggist should make a request on a postal to Kuehn & Lubbers, 96 Fulton street, New York City.

A slovenly druggist on Amsterdam avenue was taught a lesson by five young women recently. They came in together and ranged themselves in front of the soda water fountain. The druggist came forward all smiles and attention and had just asked the first young woman "What flavor?" when one of the others pointed to two large sheets of sticky fly paper on the soda water counter, both black with dead and dying victims. Her "Ugh!" of disgust was contagious, and the next moment the quintet had departed to seek another drug store.

Deputy Sheriff Mulvaney has received an attachment for \$3,266 against John C. and Wilhelmina E. Muller, as residents of East Paterson, N. J., in favor of John J. McPhee, growing out of a real estate transaction. Dr. McPhee, it is said, exchanged a drug store at the corner of Eighty-second street and Lexington avenue for 23 lots at East Paterson about a month ago. He alleges that the property was to be clear of all encumbrances, except a mortgage of \$1,600, but that he afterwards learned that there were mortgages on these lots and other property of the Mullers of \$7,000 and \$2,500. The sheriff levied on the drug store, which had been, it is said, in the name of Mrs. Muller, but another party claimed the ownership.

Interstate Druggists' League.

At the July meeting held on the 6th inst., the committee on counsel reported favorably on Leopold Leo as counsel for the New York branch. President Rontey stated that he had received a letter from M. Canning, president of the National Association, in which he expressed his disappointment at the slow progress of the New York branch. He said that in New

England they had the selfsame conditions of trade to contend against as are found in other parts of the country, and yet New England is fast approaching a state of perfect organization, in fact, it seems as though it were a question of but a few weeks. Boston and vicinity contains about 85 per cent. of the trade in its branch; very many branches throughout New England hold fully 100 per cent. of the druggists in their local associations, and nowhere has a branch been formed with less than the required 80 per cent. Referring to the success of the New England organization M. Canning says: "Many of our local branches (away from Boston) are already 'living in clover,' 'pulling together,' and peacefully selling at fixed schedule prices; a few associations are enjoying their second and even third advance in schedules. All this, too, before the general league plan can be put into operation!"

M. Canning has always maintained that if the League could secure New York in addition to New England the cause would be practically won. In his letter to Mr. Rontey he says he sees no reason to change that opinion. "We are rapidly completing our part of the work in the Eastern States—will you do your part?" he asks. Certainly the example of New York and New England organized will be a stronger argument to the rest of the country than any amount of precept.

The next meeting of the New York City branch will be held August 8, in their rooms, Mott Memorial Hall, 64 Madison avenue.

Cut it Short.

When you've got a thing to say,
Say it! Don't take half a day.
When your tale's got little in it,
Crowd the whole thing in a minute!
Life is short—a fleeting vapor—
Don't you fill the whole blamed paper
With a tale, which, at a pinch,
Could be cornered in an inch!
Boil her down until she simmers;
Polish her until she glimmers.
When you've got a thing to say,
Say it! Don't take half a day!

New York.

Committees of the N. Y. S. P. A.

President Fish announces the following committees for the ensuing year:

Legislation: Chas. F. Fish, Saratoga Springs, chairman; A. B. Husted, M. D., Albany; W. H. Rogers, Middletown; R. K. Smither, Buffalo; J. S. Boyd, Cold Spring.

Pharmacy and Queries: Thos. J. Keenan, New York City, chairman; E. S. Smith, Port Henry; J. A. Lockie, Buffalo.

Adulterations: R. G. Eccles, M.D., Brooklyn, chairman; W. G. Tucker, Albany; J. Hungerford Smith, Rochester.

Commercial Interests: Committee of sixty, Clark S. Ingraham, Elmira, chairman.

New Remedies: James H. Hutchens, New York, chairman; John R. Gray, M.D., Buffalo; Chas. F. Schleussner, Brooklyn.

Entertainment: Fred. Menges, Saratoga Springs, chairman; S. H. Carragan, Brooklyn; W. H. Quinn, Ballston Spa; J. M. Colcord, Saratoga Springs.

DELEGATES.

New Jersey Phar. Association: Geo. Kempton, New York City; Thos. J. Macmahon, New York City; Geo. B. Wray, Yonkers.

Connecticut Phar. Association: C. B. Sears, Auburn; E. A. Harvey, Camden; Geo. E. Burrows, Chatham.

Massachusetts Phar. Association: W. E. Baldwin, Glens Falls; John E. Grady, Green Island; Chas. Cook, Jr., Troy.

American Phar. Association: R. G. Eccles, M.D., Brooklyn, chairman.

N. W. D. A.: W. G. Rogers, Middletown, chairman; Martin McIntyre, Fonda; C. H. Butler, Oswego; J. H. Hutchens, New York.

Pennsylvania Phar. Association: S. J. Bendiner, New York, chairman; A. H. Mason, New York; W. W. Tooker, Sag Harbor.

New York State Board of Pharmacy.

At the examination of the State Board of Pharmacy of New York, held June 22, the following candidates were successful: Eugene W. Myers, Catskill; Valdemar Sillo, Utica; Charles E. Ames, Watertown; Charles B. Wood, Syracuse; Charles Miller, New York; Clay W. Parsons, Lockport; Ezra J. Horton, Peekskill; Alfred Pearce, Geneva; Harrie G. Salmon, Peconic; Sylvester W. Hunter, Auburn; Sam I. Brandt, New York; George V. Wickes, Canandaigua; Howard A. Benedict (assistant), Andover; George M. Blackner, M.D., Pike; Fred H. Blackner, Ithaca; John Sengstacken, M.D., Stony Point; Albert E. Roberts, Rochester; Thomas G. Schriver, Poughkeepsie; Archibald D. Kennedy, Broadalbin; William Moser, Auburn; Charles B. Wheaton, Seneca; William A. Jones, Oxford; Robert Cordner, New York; Harry W. Johnson, Hudson; Joseph S. Sheldon (assistant), Poughkeepsie; Henry B. Gildersleeve, Oneonta; David H. Moore, Brooklyn; Avery K. Brodie, Rochester; Julius O. E. Neven, New York; Edward P. O'Hare (assistant), Poughkeepsie; Charles F. Kelley, Brooklyn; Charles H. Meyer, Brooklyn; John Aquaro, New York; M. W. Sargeant, Woodbury Falls; George S. Miller, Lockport; Banks H. Boutun, New Rochelle; Charles D. Lyons, Windsor; Charles Schumann, New York; Charles A. Scott, Cooperstown; Frank C. Starr, Ithaca; Samuel C. Lovejoy (assistant), Yonkers; James G. Clark, Ithaca; Frank H. Drake, Rochester; William O. Barnett (assistant), Greene; Harvey Brillinger, Syracuse; Fred B. Sherman, Savannah; Wm. Van Korb, Amsterdam; Charles L. Noack, New York; John B. Coulston, Austin, Pa.; Earle H. Parker, Angola; John H. Quine, Rochester; Earnest J. Sanderson, Rochester; Chauncey T. Simonds, Ellicottville; Martin W. Snyder, Rochester; Henry W. Wagner, Rochester. There were 135 candidates in the class, and 55 were passed. The next examination will be held on August 31 at Albany, Rochester, Plattsburgh, Syracuse and Yonkers. The next meeting will be held at Rochester, on Tuesday, September 4, at 10 A.M.

MASSACHUSETTS.

BOSTON, July 20.—The Sunday closing of drug stores, or curtailing the extent of business which druggists may transact on that day, seems to have grown to such proportions that it is now a Massachusetts fad. The last locality to adopt this wrinkle is Cambridge, and there it was first inaugurated upon the 8th inst. Ministerial influence is at the bottom of the movement, which gained its impetus from the following resolution adopted by the clergymen of that city:

Resolved, That his honor, the mayor, be respectfully requested to execute all laws which are designed to secure the keeping and sanctity of the divine Sabbath, such as prohibiting the sprinkling of streets, the sale of tobacco and confectionery by the druggists, and any other statutes which aim at practices that are known and acknowledged to be violations of the law.

Resolved, That the committee which formerly waited on the mayor present to him the action of this body over the signatures of the president and secretary.

Prior attempts at interesting the Mayor in "blue law" enforcement have proved futile, but he evidently considered the above request one not to be ignored, and although believing that the minister had made a mistake in the matter, he deemed it his duty to instruct the chief of police to enforce the act. This he did, and the chief commenced operations by presenting each druggist with a notice in the form of a copy of the law under which he proposes to act.

THE BLUE LAWS.

A meeting of the druggists was immediately called which was attended by nearly every druggist in the city. There was but little debate and that was in favor of not opening Sunday even for the sale of drugs. This was the unanimous opinion as shown by the vote on the matter, and so on the night of the 7th, all of the stores closed at 12 o'clock, and night clerks were sent away until the following Monday. On Sunday the 8th, proprietors who lived on the same premises in which their stores were located, took good care to be away, and so it happened that not a drug store in that city was open. There were no latch strings out at the front doors, nor the back doors, either, and one of the Cambridge papers aptly remarked, "how good we are getting!"

There were many signs in the windows of the stores; "at rest" with crape attachment seemed to be the most popular. In Sullivan's window it was announced that the Blue Laws were being enforced, and that "No medicine is sold on Sunday," and the sick would have to "hold over" till Monday. At Farwell's, a large placard said, "we would gladly furnish our customers with a glass of soda, a cigar, a pill, or a dose of rhubarb, but the law says no; kindly wait until to-morrow, and we will try to serve you better than before. Give us a rest."

SOME QUEER SIGNS.

At Reycroft's a notice said, "Why don't the Mayor stop the West End Road. Bancroft closed us up to-day; we will close him up next winter." At Willard's, it was announced that the "Blue Laws closed us; we still sell Bluelets." "Closed by order of the Pilgrim Fathers," was in another window with a large rock labelled "1620," and two large blue cards announcing "Blue Laws." At Gaffey's a motto read, "How dry I am; Cambridge is dead," with a coffin painted on card board. The old established store of Mr. Saunders announced the fact that this has been a dry store for 18 years and was to-day closed for the first time on Sunday.

Down in the lower Port one proprietor had this effusion pasted up:

Wonders will never cease, dear friends,
Even if you have the money;
For our drug store will be closed today.
Now, doesn't that seem funny?
During six days thou shalt do thy work;
That's what we hear them say,
And on the seventh—we'll have a rest,
For to us it's a holiday.

In still another store there was a variety of placards. One read:

Blue laws. No medicine sold on Sunday. Sick people hold over until Monday.

Another read:

This store will not be open on Sunday until further notice. Buy your Sunday papers at the car station in Bowdoin square. Cigars, soda, and candy in Somerville. Per order of the mayor.

Sunday, July 15, saw all the stores closed in accordance with the vote taken the week previous. Funny signs were, as a rule, tabooed, but here are two new ones:

"Gone to Gloucester, clerks gone to Nantasket; wait for us." "Not open to day. But will be on hand as usual Monday morning. Leave your orders under the door, and we will look after them Monday. In the meantime don't be sick. Our motto: No soda; no nothing. If you are very thirsty you will find a dipper in the watering trough in the square. No sin to drink water."

It seems to be the general opinion that all of the stores will not be closed next Sunday. In fact, one druggist, the proprietor of two stores, has stated that he will do business on that day, and test the law regarding the sale of tobacco and soda. Another meeting of the druggists will be held this week, however, at which the action to be taken will be determined.

A SOCIAL MEETING.

The members of the Cambridge and Somerville Druggists' Association evidently believe in combining pleasure with business whenever possible, and in pursuance of this idea their first annual gathering which was held at the Barr Point House, Nahant, on July 12, was one of extremesociability. The meeting followed closely upon the first attempt to enforce the Sunday law in Cambridge, and this latter fact tended to increase the attendance. The following dealers of the two cities make up the company: E. F. Chaffie, H. S. Andrews, E. H. La Pirre, D. Olion, G. M. Olive, J. E. B. Lovering, E. P. Gove, F. Lowell, G. H. Fenelon, G. Blatchford, H. S. Garcelon, F. W. Reeves, A. E. Lynch, J. H. Sullivan, T. F. Gaffey, A. Saunders, S. H. Talbot, C. S. Lombard, C. Combe, J. Silvin, F. Shaw, J. C. Gale.

After a sumptuous fish dinner the business meeting was called in one of the parlors, and these officers for the ensuing year were elected: President, H. S. Garcelon, Somerville; vice president, E. H. La Pierre, Cambridge; secretary, F. W. Reeves, Cambridge; treasurer, E. F. Chaffie, Somerville; directors, J. H. Hubbard, A. E. Lynch, E. H. Cowdin, C. S. Lombard, P. H. Fenelon. Then came an hour's lively discussion of the Sunday closing question, and a consideration of whether or not all drug stores in Cambridge should close on the following Sunday. The closing resolve was unanimously carried, and the discussion of this famous order was an expression of indignation upon the part of those present. One prominent dealer said "public sentiment is all one way in this matter, and is on our side. If we humbly bend the knee it will desert us, but I am sure the policy we have adopted will be looked upon as the only respectable one we could pursue. If the people desire the operation of these ridiculous old 'blue laws' we will soon be able to find it out."

Another expressed it as his opinion that the whole trouble was caused by the small sales of candy to Sunday school children

who take their purchases to church for the mastication process. This habit was looked upon as a decided handicap by the teachers of catechism, and was responsible for the effort to close up the youngsters' sources of supply. The speaker said that a Cambridge alderman had told him that if these sales were stopped the closing order would undoubtedly be rescinded. Another point touched upon was that while this order prevented the druggist from selling cigars, soda and confectionery, it did not prevent the restaurateur next door from supplying the public with all of these things. After adjournment the members returned to Boston by boat; all were well pleased with the day's outing.

THE NEW ENGLAND DRUGGISTS' UNION.

An important move has been inaugurated by the New England Retail Druggists' Union which in all probability will result in organizing Vermont as a branch of the Interstate League. As an organizer, one has been selected whose reputation for success in this particular line of work is second to none. He is F. W. Reeves, of Cambridge, secretary of the Apothecaries' Guild of Boston and vicinity. Secretary Reeves will begin his labors on August 6, and during his tour he intends to meet a large majority of the druggists of that state. The purpose is to further organization and secure an endorsement of the league plan. In this work, secretary Reeves desires the co-operation and assistance of every Vermont druggist. He urges them to discuss the objects and workings of the league, concerning which, he will go prepared to answer innumerable questions. Vice-President Hyde of Rutland, may arrange a series of meetings in the larger Vermont cities, but this latter course has not been fully decided upon. The league workers of Massachusetts, wish Secretary Reeves unbounded success in his efforts.

BRIEF MENTION.

Boston and "blue laws" in the fall. The "Rexford Pharmacy" on Bowdoin street is being enlarged.

Arthur D. Reyecroft, of Cambridge, will spend the next few weeks in Centre Harbor, N. H.

The drug store of E. C. Marshall was recently robbed at night in a very bold manner.

George E. Macon, Peabody, has recently purchased a new fountain from James W. Tufts & Co.

Boston and Somerville druggists have profited by the Sunday closing of their Cambridge brethren.

A report comes from Nantucket that a liquor spotter has been endeavoring to secure evidence of sales by druggists.

H. C. Summer, head clerk for G. W. Cobb, of East Boston, is back from his vacation spent at Kennebunkport, Me.

Secretary Leavitt, of the M. S. P. A., and family have just returned from a short vacation spent in the Pine Tree state.

Cigars, perfumery, and a small amount of money were recently stolen from the store of Edwin A. Hanscom, 886 Summer street, East Boston.

Apropos of the recent Sunday law agitation, the *Boston Herald* has the following: The news comes by way of Cambridge, that the Boston drug stores are shortly to be ordered closed on Sunday. Guess not much!

A discharge has been granted in the insolvency case against A. J. Quin, 1825 Washington street; but one was refused Harry G. Travis, 275 Hanover street.

George T. Sears, 186 Hanover street, has made an assignment to H. A. Snow. This is a personal assignment and does not include the drug store which he manages for the estate of Caroline A. Sears.

Now the Cambridge authorities have notified the ice and ice cream dealers to make no deliveries on Sunday. The *Boston Herald* tersely inquires, why not wait until December before issuing the order?

It has been decided that the fire which destroyed C. I. Hood's fancy herd of Jersey cattle, was of incendiary origin, and now Mr. Hood is out with an offer of \$1,000 for the conviction of the guilty parties.

It is rumored that the agent of the board of pharmacy has been investigating Gloucester drug stores, and some of them, it is said, were found violating the liquor law. One store was being run without a registered pharmacist.

C. S. Page, a Waltham druggist, has been fined \$100 for violating the liquor law. Page was the only druggist in the city who was refused an apothecary's license to dispense liquors. Page's son, who was on trial for the same offence, was acquitted.

Thirty-seven samples of drugs were examined by the state board of health during May; fourteen of that number were below standard. The adulterated samples were ether, chloroform, chlorinated lime, extract of liquorice, red wine, stronger ammonia water, tincture of iodine, whisky, and white wine.

Germain Baudet's store, Somerville, was raided recently and he has been arrested on two charges, one for maintaining a common nuisance and the other for exposing drugs and medicines for sale without registration. He was arraigned in court and pleaded not guilty to both charges. The cases were continued until the 25th.

Henry Thayer & Co., manufacturing chemists, were the victims of a recent fire which attacked their wooden storehouse which was packed with a large stock of drugs. The loss in the building was slight but the stock was a total loss. At the time of the fire Supt. Shea placed the loss between \$5,000 and \$10,000; insured.

For the past six Sundays since the promulgation of the order prohibiting sales of anything but drugs on the Lord's day, Everett druggists have been closed. A new order of things dawned on Sunday July 15, however, for the stores were opened two hours morning and afternoon in response to a request from physicians for the purpose of dispensing prescriptions.

Henry K. Mansfield of Salem, complained of for selling whiskey to one Peter McCann, has been discharged. McCann, while drunk was arrested and confessed to the officers that he obtained the liquor from Mansfield. The warrant for Mansfield's arrest specified whiskey, but at the trial Mr. McCann testified that he purchased rum, and it was owing to this flaw in the warrant that Mansfield was discharged. Dennis Hartnett, also of Salem, has been fined \$100 for violating the liquor law.

An ingenious swindler has been obtaining goods from Malden, Melrose and Stoneham druggists. His scheme is to present forged orders, purporting to come from some local physician, Mor-

phine, cocaine and candy are most often ordered. Druggists Charles Colby and Miner of Malden, Draper of Melrose, and Walton of Stoneham are among his victims. The perpetrator looks like a Frenchman, is about 5 feet 7 inches tall, 35 years of age; has a dark complexion and black mustache, and is poorly dressed.

William Black, one of the oldest apothecaries in Chelsea, died at the residence of A. P. Martin, No. 55 Grove street, on June 10.

Mr. Black was a native of Portsmouth, N. H., and about 44 years old, and had resided in Chelsea for over 20 years.

He was never married, and had always made his home with his friend, Mr. Martin, by whom he had been employed nearly all his life. He was a member of Winnisimmet lodge, I. O. O. F. The funeral took place on the following Tuesday.

A Cambridge judge has just refused a warrant for the arrest of an ice cream dealer for delivering goods on the Sabbath, on the ground that the delivery was excepted by implication. The warrant was asked for by the police under our present Sunday law, and the dealer was doing business on that day for the purpose of making a test case. The decision of the judge, however, puts an end to any further proceedings in this direction. How will it be with the case which the druggists propose to give the authorities an opportunity to bring next Sunday? Wait and see!

E. E. Burditt, of Leominster, recently tried a novel scheme to increase trade. It is to be hoped that he was successful in attracting others to his store beside the one who secured the prize. Mr. Burditt placed \$25 in gold in his showcase and gave a key to each customer who purchased 25 cents' worth of goods. The gold was to be placed in a safe after all the keys had been sold, and the person holding the key that would unlock the safe was to have the gold. The distribution of keys was interfered with by a thief who early one morning smashed the window, grabbed the gold and fled.

Maine Association.

The Fifth Annual meeting of the Maine Pharmaceutical Association was held at the Ottawa House, Cushing's Island, Portland harbor, on Friday, June 29.

Ara Warren of Bangor, president, presided. In the absence of the secretary, Chas. A. Fowler, E. B. McAllister was appointed secretary pro tem. Twenty-two new names were admitted to the roll of membership. A communication from Henry Canning, Esq., of Boston, president of Interstate Retail Druggists' League, in relation to forming local organizations of the same, was read and ordered placed on file for future consideration.

The following standing committee on legislation for the ensuing year was appointed:

Ara Warren of Bangor, D. W. Heseltine of Portland, Chas. K. Partridge of Augusta, H. J. Hathaway of Houlton, Geo. W. Dorr, Waterville.

Resolutions proposing the establishment of a course in pharmacy at the State College were laid on the table for future consideration after some discussion, the matter not being sufficiently explained for consideration at the present time.

Mr. Scates of Westbrook, proposed a Co-Insurance among Druggists, which met with favor, and a committee of

ten was appointed to draw up and present some plan of Co-Insurance at the next meeting. A vote was taken that a committee consisting of D. W. Heseltine, and John W. Perkins of Portland and Geo. W. Dorr of Waterville, be instructed to wait upon the Governor of the State and convey to him the wish of the Association that Percy L. Lord of Calais, should receive his favorable consideration as a member of the Commission of Pharmacy.

The following officers were elected for the ensuing year, President, D. W. Heseltine, Portland; vice-president, Geo. W. Dorr, Waterville; secretary, Chas. A. Fowler, Bangor; corresponding secretary, Chas. M. Hay, Portland; treasurer, John Williamson, Portland. A body consisting of one member from each county in the state was appointed as an executive committee. After deciding that the next place of meeting should be at Mt. Kineo, Moosehead Lake, the meeting adjourned. After which came the annual banquet, which was as usual a very pleasant occasion. Many of the members were accompanied by their ladies. The meetings are becoming more popular with the ladies each year, and their attendance is increasing with each meeting.

PENNSYLVANIA.

PHILADELPHIA, July 28.—The hot weather has been a sort of a good thing for the druggist who depends mostly on his prescription trade to help maintain his business. Whilst there has been no epidemic of sickness there has been a better trade in prescriptions. The prescriptions are not for any one thing, but seemed to be for various ailments, mostly, however, for summer complaint. Besides the regular prescription trade the announcements in the daily papers that cholera is spreading in the East, and that several countries have taken cognizance of this dread disease has caused some uneasiness, and it has caused those who have not laid in a supply of disinfectants to purchase such articles as are generally recommended to keep down cholera. However, the drug stores have not begun to advertise their disinfectants, and until there is more of a scare and the probability that the disease will reach our shores, it is hardly likely that anything will be done by them.

THE STATE OF TRADE.

There is not much improvement in the wholesale drug trade, although numerous small orders are being constantly received and a wide section of the country is represented in them, yet the aggregate trade is light and to say the least unsatisfactory. Inducements in the shape of low and reasonable prices are thrown out daily in the hope of stimulating action, but dealers throughout the country decline to depart from the course they have pursued for the past several months, the majority refusing to add to their assortments when no encouragement is derived from the distribution upon consumptive account. Confidence appears to be lacking, both as regards the outlook for trade, and stability of prices, and until the same is restored an improved demand is hardly probable. Opium is very weak and is lower; the price of alcohol is maintained at the advance, and cheap alcohol, which is offered by outsiders is nothing more than diluted alcohol. Cocaine has advanced 25 cents an ounce, owing to the disagreement which has been in existence for some time between two of the leading houses that deal in this drug having been settled.

There is some question about the genuine Arrow Root which some of the whole-

sale druggists are offering. Smith, Kline & French Co., who imported some time ago a large lot of this article, say: "Bermuda Arrow Root quoted on brokers' lists and other priced lists at twenty-three cents and twenty-four cents per pound in original kegs is not genuine. We know, as we are one of the two firms who have imported any during recent years. Genuine Bermuda Arrow Root costs about 30 cents a pound. We quote by keg at 35 cents, less quantity, 40 cents a pound."

THE APOTHECARIES UNION.

On the 31st of October, the first five years of existence of the Philadelphia Apothecaries' Union expires, but to maintain this corporation steps are now being taken. A committee has been chosen, composed of James Buchman, W. H. Lacey and Dr. A. T. Pollard, who are to be the trustees of the present Union and who will receive the application of all those that wish to enter into the new lease of life which the corporation is going to shortly have. Almost, if not all the present members of the Union have subscribed to the stock of the new corporation; all that have signified their willingness have taken the same amount of stock which they hold in the old union. It is contended that this organization has been a good thing for the retail druggists of Philadelphia as it has not only brought them in closer communion with each other but it has given them a chance for an interchange of views, something that has been wanting for some time. It has not only helped the members to become broader in their views but it has given them considerable advantage in the purchasing of their goods, they being able to secure whatever they wish that is in their line, at nearly, if not, as low a rate as can be had by the dealer who can afford to purchase in large quantities.

THE CRIMINAL COURTS.

The druggists in this city have played a prominent part in crime during the last few weeks and while some of the cases were brought into court by the druggists themselves, there are some cases in which they had been forced to be the defendants. But a very few owners of stores have had as yet to undergo the ordeal. It appears that for some time the drug store of Edward Wendell, at Third and George streets, has been systematically robbed until the thefts amounted to over \$100. A few days ago, J. H. J. McCloskey was arrested for robbing the store. McCloskey was taken from the store one night after 12 o'clock in a helpless condition which was thought to be the result of excessive drinking, and the officers were shown a number of costly drugs by E. W. Gebhart, the drug clerk, who said they were taken from the prisoner. At the hearing on July 18, McCloskey was asked what he had to say, and in reply to the question said Gebhart and he were bosom friends and that he went constantly to the drug store to see him. On the night he was arrested he went there as usual, and when the store was closed up commenced drinking with Gebhart and Henry Heidman. The latter had been asked by the proprietor to stay about the place and try and detect the person who was doing the stealing. How much he drank he did not know, for he suddenly became unconscious, and when he next came to his senses he was locked up in a cell. On the stand McCloskey claimed that he was drugged and the bottles, if found on him, were placed there by some one else. In view of these serious charges, Gebhart and Heidman were both promptly arrested, though there were present as

witnesses. They were each held in \$500 bail to answer the charge of larceny, but druggist Wendell at once bailed out Heidman and acquitted him of all blame.

William Reuss, 38 years old, 5502 Haverford avenue, was arrested on July 12 by Detectives Crawford and Geyer, charged with forgery. It was alleged that he forged nine checks on the Continental Bank for various sums, particularly for \$340 between March 6 and May 18 last. Charles B. Reuss, the prisoner's father and W. S. Baird, 5426 Haverford avenue, went into business together and when they opened an account with the bank they made deposits amounting to \$405 with instructions that either party could sign checks. Recently the firm found that some one had forged their signature and had drawn on their bank account until it was overdrawn. The defendant is charged with being the forger. He is a druggist and runs a store and the police say that he has caused his relatives trouble before. He was held in \$1,500 bail to answer at court. At the hearing his father and Mr. Baird tried to get the magistrate to release him but were unsuccessful.

There is a good deal of disappointment being shown among the uptown soda-water dispensers about the dullness in that particular department of the drug business. Last year was a particularly good one for non-alcoholic drinks of all kinds. Taking this as an indication of increased business for this year, some of Philadelphia's more progressive drug men increased the size of their plants and are, in consequence, sitting in sackcloth and ashes. One of the largest soda water businesses in the Quaker City is carried on by George P. Connor, who has the Continental Hotel stand. In speaking the other day about his most popular drinks, he said: "You would be surprised to know what a large percentage of the drinks sold are of the old-fashioned kind; it is just like a swell restaurant. Those not used to good living go into such a place and have a big menu shown them. Just wait a minute and you will hear the order for beefsteak, or roast beef with mashed potatoes and a cup of coffee, just what their fathers ate and their grandfathers before them. So it is in my business. My customers pass over my mint frappé, my crushed fruit pulps and all other delicacies and take lemon or chocolate cream." J. W. Neef, head clerk in this establishment devotes a good part of his time to concocting new drinks which he gets his friends to name for him and then springs them on a thirsty public. His latest is a mixture of pineapple pulp, shaved ice and one or two other ingredients, which has a brick-red color and a taste like—that's just it. He does not know what it does taste like or he would name it.

MERE MENTION.

Mahlon H. Kline, the busiest man in Philadelphia, is enjoying a few well earned days of rest at Allentown.

W. Nelson Stem, an active member of the Philadelphia Apothecaries' Union, is enjoying the sea breezes at Atlantic City.

C. H. Gubbins, corner Fifteenth and Race streets, is fixing up his store, so that when it is completed it will compare with the best in the city.

The drug store kept by Bert. Smedley at Media is well known in that section of the country, not only for the pure drugs that is kept, but for its neatness and beauty.

Within the last few months there has sprung up quite a demand for cod liver

oil put up in capsules. During the hot summer months it is preferable to take the oil in capsules.

Professors Sadler and Trimble are working on their new text book on chemistry. It is hoped that they will so far progress that not only the Junior class can use it, but that it will be used as well by the Seniors.

The State Pharmaceutical Examining Board held an examination on July 14 at Williamsport. While the class was a fair sized one it was not near as large as those that are examined during the time the colleges are opened.

Bullock & Crenshaw have gotten out a new circular. It is unique, as well as neatly arranged, which makes it a convenience to those who deal in drugs. This firm is getting more progressive, as a look at the circular will show.

Monroe P. Lind, of the firm of Schandeln & Lind, manufacturers of "Garwood Standard Perfumes," has just returned from a southern trip. He reports having booked a large number of orders, notwithstanding the dull times.

On July 18 the first mails from California were received by the druggists here. Dr. Schenck, on that day, received letters that were sent on June 1 and up to June 18, just one month getting here. This delay was owing to the railroad strikes.

Mortimer H. Bickley, the most prominent druggist of Chester, Delaware County, Pa., and president of the Penn Steel Casting Co., has been arrested and charged with conspiracy to defraud the United States Government in the matter of gun castings. He is held for trial.

The new extract, Princess Bonnie (Quentin's), has met with as much success as the name of the opera it bears. It is growing in demand every day, and when the lovers of Miss Mayo cannot hear her sing, they use the perfume, which is as sweet as that lady is, and that is saying a great deal.

Mr. Engelman has sold to Emil Graff the store at Nineteenth street and Girard avenue, owned by Chas. G. Neely. Mr. Neely and Mr. Long recently purchased the old established pharmacy at Twelfth and Chestnut streets, and having made many improvements are rapidly increasing the business.

Corwin Mulock, who conducts a pharmacy at 1015 Columbia avenue, has purchased through Frank E. Engelman, solicitor and druggists' attorney, the store formerly occupied by Thos. A. Walker, Nineteenth and Dauphin streets. Mr. Walker is about to make a trip South on account of his health.

The Philadelphia College of Pharmacy is getting ready for the fall classes, and as the time for the opening of the college approaches the work on the new microscopical laboratory is being pushed. This new department is to be ready for occupancy by October 1, but it is thought that it will be finished before that time.

The sponge crop this year is said to be scarce, but judging from the large quantities that are being received by William B. Burk & Co., it is a foregone conclusion that this firm has been able to get its share. A few days ago a very fine lot of sponges were received. This firm has also established a large business in Europe, and their sponges are used by nearly all the royalty.

Alfred J. Wenner has purchased, through F. E. Engelman, the store of Neagly & Noll at Wilkesbarre. Mr. Wenner is a graduate of the Philadelphia

College of Pharmacy, class '84, and has had considerable experience both in New York and Philadelphia. The business will be conducted under the name of A. J. Wenner & Co., though Mr. Wenner is the sole proprietor.

It is expected that the 1894 class of the Philadelphia College of Pharmacy will be nearly the largest in the history of the college. With this class the two years' course ends, and all that enter after this fall will be compelled to take the three years' course. Owing to the increase in the course it is presumed that there are many who will avail themselves of the opportunity to get their diplomas one year sooner than it will take after 1895.

Dr. Julian Fajans, formerly of 16th and Federal streets, has opened a handsome store at Wissahickon, near the Philadelphia & Reading station. The fixtures were made by Reinle Bros., Baltimore, and Charles Lippincott & Co. have put in a very elegant onyx soda apparatus. A full line of drugs, pharmaceuticals and sundries, was supplied by the Smith-Kline & French Co., and from the display in the window we notice the doctor has not omitted a stock of the well-known brand of "Royal" Malt Extract.

William R. Warner has hardly got back from Europe when he is thinking about returning. Mr. Warner has been in the drug business since 1856, and in that time he has built up a trade which is envied by many. He is one of the best known men in the trade, and his office resembles anything but that of a druggist. There are a number of diplomas hung on the wall, and at frequent intervals there are works of French art. Besides this he has a separate case in which there are a number of medals which his firm has won at the different exhibitions.

An informal reception was given at the College of Pharmacy on Saturday morning, the 16th ult., to Prof. F. A. Flückiger of Berne, Switzerland. Prof. Flückiger was for many years Professor of Pharmacognosy in Strasburg. Dr. Squib introduced the professor to the members of the faculty, who were all present. He was shown through the college building and expressed the opinion, no better equipped was to be found anywhere. He was specially pleased with the herbarium recently presented to the college by Mr. Howard B. French and the Smith, Kline & French Co.

Frank E. Engelman, of 150 North Fourth street, is one of the best known men in the trade. One cannot make a tour of the principal drug stores any evening of the week without encountering Mr. Engelman and his \$300 diamond stud which sparkles even more brilliantly than its owner talks. Besides being well known he is very popular, but just how he manages to retain his popularity is sometimes a problem to your correspondent. He sells stores to druggists and for druggists, and if one of these gentlemen happen to be dissatisfied with his bargain he does not get mad, as the uninitiated would do, but rushes at once to Mr. Engelman to see if he can't "stick" someone else. Whatever the secret may be, Mr. Engelman evidently has the confidence of the druggists of this state as his continually increasing clientage testifies. Mr. E. was recently appointed a Notary Public for Pennsylvania.

Affable but very bow-legged drug clerk, "Walk this way, madam, if you please." Customer: "Why, bless me, young man, I couldn't walk that way if you were to give me the whole drug store."—*Chemist and Druggist*.

WESTERN PENNSYLVANIA.

PITTSBURG, July 28.—The recent general depression in business has affected the drug trade of this city to a very great extent, and the retail dealers have just cause for complaint about the state of trade. The jobbers are doing about the same amount of business as at this time last year; their number having been reduced by the non-resumption of the L. H. Harris Drug Co., Incorporated, who were burned out last July. Their customers have distributed their trade amongst the other jobbers, and it is due to this that the volume of business with each of the existing concerns remain normal. Smaller quantities of each item and long lists is the order of the times, and although profits are cut down the expense of filling orders is not decreased.

EFFECT OF THE STRIKE.

The strikes that have afflicted the country have also had their adverse effect upon Pittsburgh trade; chiefly, however, the coal strike, as the railway people were very sensible in refusing to countenance the orders of President Debs, of the American Railway Union. There were signs of a revival in the iron trade, but the strike of the coal miners delayed the resumption of work for a few weeks; the scarcity of coal prohibiting a start on a permanent basis. Now, however, the scale having been signed by most firms, the resumption has been pretty general and a better feeling is noticed in the different branches of trade. The scarcity of money still continues and collections are very backward, but this state of affairs will be ameliorated when the mills make their first pay. This revival in the iron industry, the principal one in the city, is having its effect upon other branches of trade and we feel encouraged to hope for a better winter in business than last, which was so disastrous in all lines.

Retail druggists as a rule have been buying only in small quantities, doing a hand to mouth business, except in soda water which, the past three or four weeks, has been greatly in demand owing to the hot weather.

Present indications point to a revival, and one of the foremost jobbers claims an increase in the volume of trade for the past week with a further tendency in that direction for the near future.

PERSONAL NOTES.

Carl Kephart, formerly connected with Totten & Bender, 43d street, has taken charge of I. G. Fairfield & Co.'s store (Kimmel's old stand), corner Penn avenue and 9th street. We wish him success.

D. A. Hossler, who succeeded Jos. Ehrstein, at the corner of Penn avenue and 28th street, has sold out to Schilling & Son. Mr. Hossler has purchased the store of E. F. Tafel, located on Washington avenue, Allegheny City; the latter retiring on account of ill-health.

The store of M. E. Vansickle, Oakdale Station, was burned to the ground a few days ago. The fire originated in his own building and spread rapidly, several other buildings in the vicinity being consumed. This is the second time that he has suffered the loss of his store by fire.

Mr. Charles Menkmiller, one of the best known druggists of West Virginia, paid the Queen City a visit a few days ago. "Strange as it may seem we have no state association," said he, in talking to a number of local friends. He said it was due to a combination of circumstances.

John Edwards, formerly traveling salesman connected with the L. H. Harris Drug Co., is representing French, Cave & Co., in this city, and has also a line of druggists' specialties which he brings before the retail trade in his inimitable style. Mr. Edwards is very popular with the trade and has been doing a rushing business despite the hard times.

A. S. Bender, formerly of the L. H. Harris Drug Co., and G. F. Smith, who was in the employ of the same firm for many years, have opened an office in the Telephone Building, Pittsburgh, as brokers and manufacturers' agents. They now represent several of the leading manufacturers in the country, and are doing a very fair business. Any house desirous of being ably represented in this city should correspond with them.

We learn with regret of the death of J. D. Kearns, who has been identified with the drug store at the corner of Grant street and Fifth avenue for a period of 38 years in the capacity of employee and lately owner. He died July 9 at the residence of his son-in-law, W. L. Coyle, Dithridge street, Oakland, at the age of 69. He was a graduate of Jefferson College, Canonsburg, Pa. He leaves three children, one of whom is an esteemed physician of this city.

Chas. Pabst, formerly in the druggists' sundry line and latterly partner in the L. H. Harris Drug Co., has severed his connection with that concern and gone into the physicians' specialty line. His location in the Telephone Building, one of the best appointed office buildings in the city, is easily reached from all points of the two cities, and here he carries a stock of tablets, triturates, fluid extracts and physicians' supplies, which are sold at very reasonable prices. His venture is already a success, with a good prospect for the future.

ILLINOIS.

CHICAGO, July 21.—The sky is just clearing up unless all signs fail, and no branch of commercial trade is more jubilant than the drug. About the 14th inst. the tide turned, and by the 18th the wholesale druggists had the old-time feeling of a demand which called forth all forces to meet. In fact, business is booming, and it is almost impossible to fill and prepare the orders for shipment. Orders are away behind, according to the natural results of a congestion of freight traffic. Everybody in the country wanted their goods at the same time. It was a case of bustle in every department, and it will be several days before the orders which are now filling the mails and chiming over the wires, will be out of the way. But these are only the emergency orders, and then will come the work of stocking up. All the smaller stores in this part of the country have been running on light stocks for several months, and are now forced to build up in every department. Some of this is due to the stringency of the times and the general depression of all trade, but many of the outside dealers, and even some of those within the city limits of Chicago, have been passing through a sort of house cleaning. Among these there seems to have been an unwritten agreement to reduce the heavy stocks in certain directions, where they have been carrying large quantities. These were not essentially stale goods, but it would be a surprise to outsiders to know how small the stock in some large drug houses in their midst has grown in the past few months.

This has been done with a view to putting in big new stocks, and in many instances the old fixtures will give place to elaborate new ones. This means a healthy advancement in the wholesale drug and outfitters' business, and the prospects for this fall are bright. Another condition auguring well for the trade is the fact that there never has been such favorable general demands in this part of the country. The depression, followed by the strike, has caused retail dealers to hold down their orders to the minimum. With the reaction will come heavy demands, and the manufacturers and wholesale dealers will be kept busy taking care of them.

THE STRIKE.

One of the great inconveniences caused by the strike was the walk-out, or attempted walk-out of the teamsters of Chicago. Several of the wholesale drug houses have teaming contracts, and were notified that the men might strike. Some of the men did go out, but only one day was there any embarrassment. Those employing their own teamsters gave notice that ample protection would be afforded and that the men would receive the most careful treatment if injured.

AMONG THE TRADE.

Lord, Owen & Co., are at present employing six traveling men in the state of Iowa alone.

Mrs. F. M. Bunting, of Rock Valley, Ia., has just purchased a fine stock of drugs from Morrisson, Plummer & Co.

Felix Kalacinski has just opened a new drug store on North Ashland avenue, fitted and stocked by Morrisson, Plummer & Co.

John Bray, associated in the retail drug business at Joliet, Ill., with his father, E. M. Bray, has been in this city buying goods.

Hattie M. Fuller, a prosperous Chicago druggist, is enjoying a summer outing among her relatives at Sault Ste. Marie, Ontario.

L. J. Meyer, western traveler for Lord, Owen & Co., with headquarters in Denver, is visiting his old home, Fort Wayne, Ind., for a month.

Geo. S. Lord, of Lord, Owen & Co., is spending the summer in Europe, accompanied by his family. They are at present at the springs in Torquay, England.

W. G. Taylor, one of Morrisson, Plummer & Co.'s western traveling men, returned recently from the West and related a number of exciting incidents along the lines of the strike.

E. A. Oakes, S. H. Lewis and J. S. Kenyon, travelers for the sundries department of Lord, Owen & Co., are in the city getting out their fall line of holiday goods and sundries.

George Umsted, for a number of years a druggist on the West side, but who has been out of business some time, opened a drug store at Sixty-Eighth and Honore streets early this month.

The business of the late Dr. D. R. Dyche & Co., has been incorporated under the name of D. R. Dyche & Co., at Chicago. The capital stock is \$30,000 and the incorporators are Wm. A., Geo. B. and Frank B. Dyche.

Robert Stevenson, head of the wholesale drug house of Robert Stevenson & Co., sailed on the 21st inst. for Liverpool, where he goes to meet his family, who are sojourning among relatives in Ireland and Scotland.

J. E. Bull has purchased the drug store of Geo. M. Bays & Co., 2800 Cottage Grove avenue, and the transfer was made July 28. Mr. Bull is not a practical druggist, but considered the opportunity a good one for investment, and is putting in a fine stock.

Evenston & Johnston, well known druggists of Hinsdale, Ill., have just completed a handsome brick block, into which they will move. Mr. Evenston is one of the wealthiest druggists of the interior of the state and has been engaged in many public enterprises.

Wholesale druggists of this city are taking great interest in the annual meeting of the Wisconsin Pharmaceutical Association which convenes at Janesville, Aug. 14, for a three day's session. From advices received, the largest meeting ever recorded will be held. Every druggist and drug clerk in the State has received an invitation. Chicago and Eastern drug houses will make exhibits.

Rolling & Krauz, of Bellevue, Ia., were in the city early this month and placed an order with Lord, Owen & Co., for one of the handsomest drug outfits shipped out of Chicago for a long time. Mr. Rolling was formerly of the firm of Dirakes & Rolling and has been in trade in Bellevue for 23 years. Krauz is a bright young druggist and the firm is one of the most substantial in Iowa. The sale was made by Chas. E. Soper, one of Lord, Owen & Co.'s traveling salesmen.

The potato bug epidemic in Colorado is illustrated by a significant telegram received by Peter Van Schaack & Sons, at the time the strike began to break. A Colorado firm requested them to send tracers after a shipment of two tons of Paris Green, and to rush an order of 500 pounds more of the same stuff! This is one of the largest single shipments ever made out of Chicago to retail dealers and shows the extent of the plague in the West.

Dr. Sidney Sawyer, one of the pioneer druggists of Chicago, died in this city on the 12th inst., of the feebleness of old age, aggregated by the warm weather. At the time of his death he was in his eighty-fourth year. Dr. Sawyer came to Chicago in 1859 and established himself in the drug business, and his store on Lake street, was the best known in Chicago, in the early days. Investing extensively in real estate, he was enabled to retire from the drug business after a few years, and pass the evening of his life in comfort.

T. C. Ballard, whom everybody in the trade knows as one of the veterans of the Morrisson, Plummer & Co. establishment, is going on a fishing trip next week, and every daily paper will assign a reporter to interview him on his return. Mr. Ballard has a grievance against the AMERICAN DRUGGIST. When his new quarters were completed, the DRUGGIST described them, which he enjoyed; but the statement that he had been with the firm six years instead of sixteen years pained him.

F. W. Hurlburt, administrator of the estate of the late C. H. Merrill, has sold the drug store owned by the latter at North avenue and North Clark street to the new firm of Gaul & Romans. Merrill committed suicide June 15, ill health supposed to be the cause. The new firm has an excellent opportunity, as the location is one of the best on the North Side. Careful attention to business will build up a good trade. Mr. Gaul has been a drug clerk in Chicago for ten years and came here from Northern Michigan. Mr.

Romans has been a member of the drug firms of Romans & Stefano and Jefferson & Taylor, but withdrew to engage in the new business.

On the night of July 8, C. S. Meyer, manager of a drug store at 85th and Wentworth avenue, shot and slightly injured Miss Bertha Everson and then shot himself. It was the sad result of a practical joke and "didn't know it was loaded." Meyer is a married man with several children and Miss Everson is his sister-in-law. Returning home that night from the store, Meyer passed the Everson house, and stepped in for a minute to chat with the young folks. Miss Everson sat in the bowered garden at the rear, talking with Alex Heilberg and Morris Hammond, both drug clerks. Meyer entered and leveling his pistol at Miss Everson, pulled the trigger. The ball passed through her arm and she fainted. Seeing what he had done, Meyer placed the pistol to his own head and fired. Neither wound was serious, and there was no prosecution.

MICHIGAN.

DETROIT, July 19—Mrs. L. W. Coleman, Petoskey, Mich., has placed a chattel mortgage on her stock of drugs for \$659.

THE BUSINESS OUTLOOK.

The following opinions regarding business conditions will be of interest to the trade:

Parke, Davis & Co.: Our business is largely in excess of what it was last year at this time. We are running night and day part of the time to get out orders. The general trade is very good. Orders and collections are better than they have been for some time. Our working force has not been cut.

Farrand, Williams & Clark: Business in the drug line has been very good. Sales are greater than they were a year ago. The strike was a serious detriment to the trade. For a long time we were unable to make shipments. We think it will be only a temporary set back to trade.

Frederick K Stearns: Business is steady but there is certainly no boom. This firm has almost as many hands as usual, and we are keeping our end up.

NEWS NOTES.

Mayhew & Sons have opened a new store at Ypsilanti.

C. B. Harrison has sold his drug interests at Lisbon, to C. B. Williams.

Swetzer & Haines of Utica, have been succeeded by Swetzer & Stevens.

Dr. Warne has placed a new prescription case in his drug store at Kalkaska.

A new plate glass window was last week placed in Serui's drug store at Sault Ste Marie.

E. A. Young, Clio, has sold out to A. Kellogg. He will start a new store at Fenton.

The drug stock of John Reuk at Lansing, was recently sold on a chattel mortgage to C. W. Reck.

Henry Cleland, Detroit, last week renewed a chattel mortgage to James Cleland for \$450.

Hialop & Greenway, Petoskey, have dissolved partnership. Robert Hialop will continue the business.

N. J. Teal & Co., Detroit, have removed from 1421 Fort street to the corner of 14th and Michigan avenues.

G. H. Collins, Charlotte, has entered the employ of F. B. Ranayle, one of the leading chemists of Lansing.

W. J. Tillitson, a prominent druggist at Lainsburg, has just completed a handsome new residence in that place.

The affairs of the Middletown Drug Co., at Muskegon, is being wound up by J. F. Peppler, the former manager.

Detroit creditors last week seized the stock of George E. Blake at Brown City. It will be sold to satisfy their claims.

Burglars last week entered the drug store of G. M. Bell & Co., at Benton Harbor, and stole about \$100 worth of goods.

John B. Young, Detroit, has moved his drug stock from Mitchell avenue, to the corner of Twelfth and Grand River avenues.

J. G. Weisinger has purchased the stock of James McFarland, 1422 West Fort street, Detroit. It is called the Weisinger Pharmacy.

John Andrus, of Utica, pleaded guilty last week of selling drugs without a license and was fined \$10, the maximum sentence for the offense.

Charles E. Smith, manager of the W. D. Hirschaw Drug Co., was recently married to Myrta Horton, of Clarkston. The couple took a trip around the lakes.

Charles W. Avery, Hillsdale, who has been in the employ of J. G. Wolf and C. S. French, of that city, has entered the employ of the Triangle Pharmacy, Detroit.

Goodyear & Co., Ann Arbor, have just completed extensive alterations in their drug store. This firm now has one of the best appointed drug stores in that part of the state.

Dorance & Son, Coldwater, have been renovating their store. Painters and decorators have been at work and the establishment presents a decidedly improved appearance.

F. M. Kilburn has opened up a finely appointed drug establishment at Corunna. The store is located in the Hulich Block, which has been just finished. Mr. Kilburn owns the block.

James Seymour, of Reed City, graduated from the Pharmacy department of the University of Michigan in June. He has since been notified of his appointment as an instructor in that institution.

The A. H. Lyman & Co., has been incorporated at Manistee to take the place of A. H. Lyman. Mr. Lyman is president of the new concern. The new firm will devote considerable attention to the wholesale trade.

Frank C L'Hommedieu, Detroit, who recently died, left an estate valued at upwards of \$5,000. Arthur Bassett, the deceased man's partner, was made general adviser of the widow in the disposal of the property.

Seely, Robinson & Son, Detroit, is the name of a new firm of manufacturing pharmacists at 120 West Congress street. They occupy the old Nelson, Baker & Co. location. The company is composed of G. J. Robinson and G. H. Seely.

George M. Connor, has moved his stock from 95 Grand River avenue to 91 Grand River avenue. This is only a temporary change, as he is having his former quarters entirely renovated. The stock will probably be moved back again by the first of September.

James Hines, charged with entering the drug store of the late Seymour Frizelle, has escaped prosecution. The officers had a sure case against him, but since both the

defendant and the complaining witness are dead, the prosecuting attorney concluded to drop the case.

Edward M. Bailey, a druggist, at Paw Paw, was last week arrested for violating the local option law. He pleaded not guilty and was bound over for trial. Bail was fixed at \$200. A considerable number of druggists in this vicinity have been caught napping and on several occasions heavy fines have been imposed.

On the Fourth, about \$50 worth of fireworks exploded in the window of Williams' drug store at Manistee. Rockets and candles shot in every direction, but Mr. Williams confined the blaze to the one place. Rockets punctured several show cases and made a few holes in the ceiling. The damage from water was considerable.

A Marquette lad named George Kratz made quite a haul from the drug stores there recently. He entered both Perkins' and Kirkwoods' stores and helped himself to everything within reach. He buried his booty, consisting of cigars, perfumes, etc., in the ground near Teal Lake. The boy talked too much and was arrested. The plunder was all recovered. George was sent to the reform school.

Frederick T. Wheeler, manager and manufacturing chemist of the Detroit Metric Granule Company, came to an unnatural end Monday July 16. Young Wheeler complained of being ill and went into the laboratory to get some medicine. He mixed it in a tin cup and a short time afterwards expired. The effect of the drug according to the belief of physicians, was to cause paralysis of the heart. An examination of the cup was made but no traces of poison could be discovered. The young man begun his studies with Charles Wright & Co., several years ago and went to Chicago where he became manager of the granule department of Morrison Plummer & Co. He afterwards returned to Detroit where, with his father, organized the Detroit Metric Granule Co. Mr. Wheeler was a bright, capable young man, and popular with all who knew him.

Seymour F. Frizelle, of 75 Duffield street, Detroit, went home from his drug store not long since because he was feeling ill. That evening he was attacked by apoplexy, and on Saturday night he died. Mr. Frizelle was for years one of the most prominent druggists in that city. He was born in Syracuse, N. Y., 57 years ago. Several years before going to Detroit he did business in Saginaw, and after that in California, where he accumulated a large fortune. He went to Detroit about 15 years ago, and opened his well-known drug store on Michigan avenue. By his careful attention to business and the great consideration he showed his customers he built up a large business. He was an unfortunate buyer, however, and his professional skill, which was of the highest order, did not serve to counterbalance his deficiency in that respect. Consequently, he suffered reverses by which he lost nearly all he had last winter.

J. J. Reithman & Son, wholesale druggists at Denver, Col., recently attached the premises of a local druggist named Godaman to secure payment of a debt. Godaman brought suit against the wholesale drug firm to regain possession of his property and was successful. The defendants moved for a new trial but were unsuccessful and an appeal has now been taken.

MARYLAND.

BALTIMORE, Md. July 20.—To the query what is the news in the drug trade? one gets the invariable answer it is dull. Just as if the dullness were a new feature in the business and had not been with us for the past several years. It is amusing to consider the different reasons that are given for this dullness. You hear one lay the blame on the tariff, another one the cutter, again one on the department stores, etc., until one who is in pursuit of the real cause finds himself wrapped in a maze of confusion. One gentleman has been heard to lay the blame on the recent railroad strike away out in Chicago. Occasionally you do hear one of the prime causal factors named and that is the overcrowding of the business. I had an interesting experience myself a short time ago. I had some business with a fellow druggist in another section of the city, and during the conversation asked him how business was. I received the reply very dull and he immediately began to amplify his remarks about the physicians in his neighborhood who had become enraptured with a tablet triturate agent and laid in a stock of his goods and were proceeding to dispense them among their patients and thus cut off the regular prescription trade he would otherwise have had. Had I gone right home I suppose his explanation would have been satisfactory. But a little further down the street I met by chance a physician friend and stopped for a little chat. Here, I thought, is a busy man who has his own practice to attend to. I asked him the old, old question. Very dull, says he. And then he started to tell me his little tale of woe; how the druggists were counter-prescribing and thus cutting off a large portion of his revenue. I was amazed. Here are two expressions on the same subject, viewed from different sides it is true, but just as opposite as night from day. It worried me and when I left him I endeavored to think it out. It then occurred to me that possibly as long as the general trade was so dull and so many people had been out of employment on account of the mills and factories being shut down, that the free dispensaries were to blame. Following this idea and wishing to get at the facts in the case I had myself placed in a position so I could get the necessary information from the dispensary in that section. But even here I received the same reply comparatively speaking, they were dull. That left but one natural assumption and that was that there could not be much sickness. Now I do not wish to say that I am an advocate of promiscuous free dispensaries and tablet triturate handling by the physicians, for I appreciate as much as anyone the depressing effect which both have on the business, but for the peace of our minds let us put a stop to our morbid speculations and be content with the condition of business and not make ourselves miserable by trying to get up too many causes. I would like to say a few things on the subject of free dispensaries and their undoubted abuse in this city, but my space is limited and it would be better to reserve the matter for some future letter. I would advocate their existence with restrictions.

Edward A. Schrader has registered as manager of Granel's pharmacy, 212 E. Cross street.

The first colored pharmacist to apply for registration in the city of Baltimore is J. W. Browning, he has opened a neat store corner Druid Hill avenue and St. Marys street.

Geo. F. Ott has qualified before the State Board of Pharmacy and has registered for his store corner of Bond and Townsend streets.

It is reported that the Maryland College of Pharmacy proposes to raise its curriculum by giving an extra course in Analytical Chemistry and Practical Pharmacy. This is the true way to increase the standard and character of the business.

Virginia Pharmaceutical Association.

The thirteenth annual meeting of the Virginia Pharmaceutical Association, held at Blue Ridge Springs, Va., July 10th, 11th and 12th was a grand success in point of enjoyment of the members present, the number and variety of papers read and the different parts of the State represented. The number present was not very large, but many more than were present last year. The plan, introduced last year, of games and athletic contests works like a charm and in no way interferes with the business and scientific meetings. In fact, it adds to their interest by getting interested members who otherwise would not attend.

The papers read were: "The Value of the Association to the Pharmacists of Virginia," by Dr. E. A. Craighill of Lynchburg; "Pharmacy of the 18th Century," by Hugh Blair of Richmond; "Indigenous Plant Called Sarsaparilla," by C. B. Fleet of Lynchburg; "The Unity of Matter," by Gordon Blair of Richmond; "Permanganate of Potassium as an Antidote for Opium Poisoning," by Geo. E. Barksdale of Richmond; "Adulteration of Cream of Tartar," by same author; "The Menstrua of the M.D.P.," by A. H. Craig of Lynchburg.

Interesting discussions of the new pharmacy law, the action of the Board of Pharmacy, doctors dispensing and other matters of general interest to the profession enlivened the meetings.

The following officers were elected for the ensuing year: President, B. H. Gorrill of Lexington; vice presidents, Dr. A. W. Eley of Suffolk, Andrew I. Snellings of Richmond, E. C. Jackson of Norfolk, O. C. Sprinkle of Marion; secretary, C. B. Fleet of Lynchburg; corresponding secretary, W. S. Alfried of Petersburg; treasurer, C. H. Lumsden of Lynchburg; executive committee, E. A. Craighill, E. Roethlein, W. M. Strother, all of Lynchburg. The following gentlemen were nominated for vacancies in the Board of Pharmacy: Geo. T. Mankin, Falls Church; J. L. Avis, Harrisonburg; A. E. Smith, Williamsburg; W. M. Brown, Buena Vista, C. B. Fleet, Lynnhburg.

The next meeting will be held July 16, 1895, at Blue Ridge Springs.

IOWA.

DES MOINES, July 21.—For the first time in years Des Moines has saloons. They now number over forty. This was brought about by the last legislature passing what is known as the Mulc Law. This gives cities of 5,000 population and over the right to grant licenses upon a majority of the voters at the last general election so petitioning; in cities of less than 5,000, 65 per cent. of the voters must petition. Several of our druggists have closed up shop and gone into the saloon business. Already six stores have closed.

Des Moines before the advent of saloons had over 70 drug stores. They are now decreasing, and will, before many months,

reach the level of legitimate pharmacy. This is as it should be.

On July 8th the *Iowa State Register*, in the issue of that date, contained a ferocious attack on liquor selling in drug stores. The paper scored the authorities and also the pharmacy commission. Secretary Spaulding now says that he will close these up if they do not stop their illegal sales.

Harrett & Co. have put in a fine soda fountain.

A new drug store has been started at Highland Park, Des Moines.

F. E. Newman & Co. have moved their drug stock and started a saloon in their room in the Morgan hotel.

The Legg Pharmacy, Sixth and North streets, has changed hands, R. B. Stiles now being the proprietor.

Priebe & Co. have closed their East side store and started a saloon in the room adjoining their store in the Abone house.

R. C. Johnson & Co. have moved their drug store two doors west and started a saloon in a room formerly occupied by them.

Prof. Grimes, of the Highland Park Pharmacy School, is going to study medicine at some Eastern school the coming winter.

The Chas. W. Rogg Company have completely refurbished their pharmacy, and to say it is elegant is putting it mildly.

Coe Bros., pharmacists, Sixth and Grand avenues, have failed. Liabilities, about \$1,200; assets supposed to be about the same.

The soda water business seems to be lively now-a-days. Walter Scott, Noonan Lichty and Stroam & McCannum seem to have the lead in this line.

President Ward has appointed Prof. S. R. Macy chairman of the Committee on Adulteration. This insures the Association a valuable report from this committee at their next meeting.

Geo. Judish, head clerk for Harlaw Bros., has bought a pharmacy at Ames, Ia. George is one of the best posted and most popular clerks in Iowa, and deserves success in his new venture.

H. W. Huegle has moved his stock from the Iliad Hotel to rooms formerly occupied by the Converse Dry Goods Co., between Fifth and Sixth streets. He now has one of the handsomest stores in town.

Webb Sours believes in improvement; he already has a handsome store, but not content with that he is putting in an elegant plate glass front and a tile floor. When completed he will have a handsome pharmacy.

Frank Ward, the popular East Side druggist, has been canvassing the city trade for Hurlbut, Ward & Co., during the absence of M. W. Ward, at the lakes. Frank is a genial good fellow and well-liked by everybody.

H. B. Harrod has purchased the pharmacy at Twenty-fifth and North streets (University place), formerly owned by J. Cluer. Mr. Cluer wishes to devote his whole time to his diphtheria remedy, "the Harvard treatment."

The mayor notified the druggists that they must cease the illegal sale of liquor, and this was followed by S. J. Spaulding, secretary of the State Pharmacy Commission, giving notice to the same effect. This all tends to make the old time legitimate pharmacist smile, a smile such as they haven't before since prohibition went into effect.

The strike does not seem to have any effect on the retailers here, but it has cut down the volume of wholesale trade considerably. However, trains are running regularly again and business is looking up all along the line.

Ex-Secretary Rose Upson, of Marshallton, has sold her store and moved to Milwaukee, where she will devote herself exclusively to the practice of medicine. She will be missed in Association circles, as she is an earnest worker in the cause of pharmacy.

The "Des Moines Pharmaceutical Association" has been formed to maintain schedule prices and prevent rate cutting. The officers were elected as follows: President, A. H. Miles; vice-president, Charles Rogg; secretary, E. F. Whitney, and as treasurer, Milo Ward.

A committee on paper and queries should also be appointed, and for chairman we would suggest A. H. Miles. Mr. Miles is a hard worker for the success of the Association, and is one of the best posted pharmacists in Iowa. The Association needs more practical papers.

The surviving member of the firm of Coe Bros., pharmacists, who conducted a drug store at Sixth and Grand avenues, Des Moines, assigned recently, W. G. Scott being the assignee. The liabilities of the firm are \$1,328.80, there being sufficient assets, it is thought, to pay out.

Two men were discovered by L. H. Bittinger, a pharmacist of Creston, in the act of setting fire to his store. He opened fire upon them without effect, but was himself sandbagged. It took an hour to revive him. His stock of drugs and wall paper are a total loss.

President M. W. Ward, of the State Pharmaceutical Association, is back from his summer outing at Spirit Lake. He is already booming next year's meeting at Spirit Lake. With two such rustlers as President Ward and Secretary Spaulding booming things, the success of the meeting is assured.

Geo. Barnes, a druggist doing business at the Morgan House, was called on by a United States post-office inspector, who, in searching the place found a large quantity of stamps. He was charged with receiving stolen postage stamps in the United States Court, and Judge Woolson sentenced him to pay a fine of \$1,800 and serve four years in prison. His store is now closed.

OHIO.

CINCINNATI, O., July 20. — The celebrated injunction suit of the John D. Park & Sons Company against the wholesale druggists of this city and George Baner of Philadelphia, is now being tried in the Superior Court by Judge Samuel F. Hunt and a jury. The case is exciting intense local interest, and the trial has been in progress for the past week. Attorneys Paxton, Warrington, and Boutet represent the plaintiff and Messrs. Kittedge, Wilby and Simmons the defendants. Most of the time thus far taken up has been consumed by the opposing counsel arguing technical points at law. The plaintiff asks for a restraining order, because George Bauer, a representative of the Proprietary Medicine Committee of the N. W. D. A., it is alleged, came to this city and collected evidence that the former was engaged in cutting prices. Bauer is said to have worked in connection with local jobbers who are competitors of Park & Sons. A number of witnesses have been subpoenaed by the plaintiff's

attorneys, and it will require at least one week to hear their testimony. The courtroom has been thronged with druggists every day thus far, and speculation is rife as to the outcome of the suit. The case is really of national importance, as the members of the N. W. D. A. regard Park & Sons as their arch enemy, as they deal exclusively in proprietary articles. Their business extends all over the middle States, and they are one of the best known houses in their line in the country. All retail "cutters" are said to be supplied by them, and the N. W. D. A. is anxious to cut off their supply. The efforts in this direction have proven futile up to date; but Madam Rumor has it that Park & Sons are beginning to experience some trouble in getting goods. There will be a large number of wholesale druggists here from all parts of the country next week to testify in the case. George Smith of Philadelphia, in whose employ Bauer is, is said to be one of the notables. Jobbers from St. Louis, New York, Baltimore and other cities are now in the city.

[Special to the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.]

CINCINNATI, July 23. — The suit of Park against the N. W. D. A. has been dismissed with costs against the plaintiff, thus completely vindicating the Association.

The Ohio State Board of Pharmacy held its first examination, based on the new Pharmacopoeia in the city recently. The following were successful and granted pharmacists' certificates: W. L. Ritter, C. G. Streith, H. C. Ulen, S. R. De Haven, Otto Kistner, J. G. Oesper, J. G. Wurster, T. E. McNamara, W. M. Hamilton, Mrs. Leo L. Schreck, D. C. Kunkle, A. M. Moon, S. C. Agin, F. W. Kisker, H. C. Rapp, Will Fesker, J. H. Schroeder, Paul Eiche, J. S. Greenwood, E. T. Knoop, Martha Lebens, Ferdinand Ott, E. E. Monning, E. E. Doty, Herman Kattman, F. C. F. Roetting, George W. Racer, J. L. Cramer, J. D. Crossland, Bert Holmes, Louis A. Riber, D. C. Ross, Fr. M. Klusman. The following were successful at Assistant Examination: Jos. Brand, T. D. Buford, John Kalley, Albert Beckman, Herman Berger, Karl Stoerr, A. Mecklin, Wm. Baumann, B. J. Cahill, C. J. Harris, W. T. Ford, Owen Craig, W. C. Herman, and A. S. White. The next examination will be held at Toledo, O.

Ed. Voss, the popular young druggist, has given out the contract for having both his stores re-frescoed.

George Kylius, the druggist at Liberty and Denman streets, will spend August with his family at Lakeside.

Ed. Peak, the Covington pharmacist, is now a member of the Board of Police Commissioners in our sister city.

Harry Streithorst, the affable young pharmacist, was seen staggering in the street the other day. It was thought he had vertigo, but was learned later that he was trying to get a "peek" at his new mustache.

The two drug stores of the late Margaret Kautz were sold at auction one day last week. Dr. Armstrong, the Cumminsville druggist bought one place and Frank Kautz, Jr., the other. Both places sold cheap.

Dr. A. Lue, of 56 Everett street, has organized a botany class of young pharmacy students. They will make excursions into the surrounding country every Saturday. Four such trips have already been made, and the students are delighted with their progress.

Allen & Company, one of the oldest drug firms in the city is no longer in existence. The remains of their dwindled-down business were sold the other day at auction in the Blymyer Building on Main street. This time honored firm was known all over the United States.

Julius Eichberg, the well-known local chemist, has written a very able article in the journal published by the College of Pharmacy on "The Examination of the Gastric Secretions in Stomach Troubles." The paper was read before the Academy of Medicine at its last meeting.

J. W. Deitrich, the oldest living President of the O. S. P. A., was in the city a few days ago, renewing acquaintances. Mr. Dietrich now lives in Carthage, Mo., where he has a lucrative business. He managed to take in the meeting at the Grand Hotel and shake hands with some of the old "boys."

Dr. Louis Sauer, the West End pharmacist, had his hands full last week supplying medicine to the members of "General" Kelly's army of commonwealers, which was encamped in the outskirts of the city. The doctor generously donated all the pills and porous plasters needed by the travel-stained tramps.

"Uncle" John Keeshan, the veteran pharmacist, is now a disciple of dumb bell practice. The "old boy" says he will soon be able to give some of his younger brethren cards and spades when it comes to doing fancy work with his arms. He is very robust despite the fact that he is nearly 85 years of age.

"Nitrogen and its Estimation in Nitrogenous Bodies" is the title of a paper published in College of Pharmacy Journal of the current issue. The author is Prof. Charles T. P. Fennell, the well known chemist of this city. The paper was originally read before the Cincinnati section of the American Chemical Society.

The Alumni Association of the Cincinnati College of Pharmacy has elected the following officers for the current year: President, Frank H. Freerides; First Vice President, Louis A. Riber; Second Vice President, Otto E. Kistner; Recording Secretary, Theodore J. Moeller; Corresponding Secretary, Louis Klayer; Executive Board, Emil Huhn, Charles J. Kafer, William Simonson, Fred Roetting, Charles Freericks, C. T. P. Fennell, Julius Eichberg, and Theadore Wetterstrom.

An elopement that caused no end of surprise among local druggists last week was that of Miss Hattie Park, daughter of A. Goff Park, the well-known jobber in proprietary remedies, and George Cook, of Hutsonville, Ky. The young lady was attending school at Hutsonville, in Boone County, this year, and there met Cook who was studying to be a doctor. It was a case of love at first sight, and the young couple soon became engaged to be married. The parents on both sides objected because both parties were under age. Miss Park arrived home from college last June and kept up a correspondence. Last week she was given permission to visit some of her lady friends in Hutsonville. She left Tuesday and met Cook. The young couple went to New Albany, Ind., last Friday, where they were married. They immediately wired Mr. Park. He and his wife were considerably disturbed over the affair. There was nothing objectionable about the match save the age of the young lady. The spirit of forgiveness has already gone out, and the young couple will arrive here this week to receive the parental blessing.

Dr. Joseph Elfers, who was formerly in the drug business at Longworth and Plum streets, and later physician at the City Infirmary, has located in Elgin, Ill., where he expects to practice medicine and pharmacy jointly.

Dr. Charles Beakirt, who spent his boyhood days behind a number of drug counters in this city, has gone to Europe to finish his medical education. He graduated with honors from the Ohio Medical College a short time ago, and will become an oculist.

Miss Cora Dow, who is a Ph. G. of several years, standing, is now the presiding genius over two swell drug stores it is said, and talks of establishing a new store on Walnut Hills not very far from the proposed viaduct on Gilbert avenue.

Louis Klayer, the druggist at 7th and Elm streets has just had his store repainted and repaired. The fixtures have been changed around and the place entirely metamorphosed. They must be coming rather easy for Brother Klayer.

Joseph Dehner, the well-known and popular druggist, has tired of dispensing drugs and has signed a contract to go to work for the Anhauser-Busch Brewing Company of St. Louis. Joe will make his headquarters in Terre Haute, Indiana.

Anton Schmidt, the West-end Pharmacist, opened one of his penny-in-the-slot machines one day last week and found about four hundred iron washers. The machine no longer adorns the center of his pharmacy, as he says it was a losing venture.

Billy Byrne, the clever young druggist of Clifton, is spending the heated season at his old home in Mason County, Kentucky. Some say that he will bring back—but that is really none of our business, as he's old enough and a desirable catch.

Ferd Egner, one of the oldest, and who was thought to be the most substantial druggists in the city, surprised all who knew him by making an assignment for the benefit of his creditors. His place was closed but a short time, as he had little difficulty in arranging his business affairs satisfactory.

Dr. R. H. Weatherhead, who has been in the drug business at 6th and Vine streets for more than a half century, has been elected a director of the Edison Electric Light Company. He is a great friend of the Vice-President of the concern, George B. Kerper.

During the months of July and August the different wholesale drug houses will close their places of business at one o'clock on Saturdays. A game of baseball will be arranged in the near future between the employees of Hale, Justice & Co., and those of the Stein, Vogeler Co.

Johany G. Baur of Sycamore and Malton streets will soon retire as the Special Inspector of Drugs at this port. His place will be taken by one of his brethren of the Democratic persuasion. John will retire with the good wishes of all the boys around the Government Building.

The journal to be published by the Cincinnati College of Pharmacy has

not yet made its appearance among the expectant members of the trade, but it is a sure go. Some of the best pharmaceutical writers in the country will contribute.

Professor William Simonson, the well-known analytical chemist of this city, has fitted up a new library in the rear of his store, corner of 9th and Race streets. He is at present doing some work for the city in connection with slop feed dairies. His analysis of the milk will be awaited with interest.

MISSOURI.

St. Louis, July 18.—The St. Louis Drug Clerks' Society met on the evening of July 12 and recorded the largest and most enthusiastic convention of their existence. It was decided to give a grand moonlight excursion down the Mississippi on the evening of the 8th of August. Arrangements are now in progress to make this one of the most enjoyable events of the season. They have engaged the large excursion steamer City of Vicksburg, and will spare neither pains nor money in seeing that their friends have a good time. It was found that the work devolved upon the Secretary was entirely too cumbersome for one member to attend to, so a new office was created, and Mr. Charles F. Geiger elected corresponding secretary. The committee on constitution and by-laws submitted their report suggesting a number of changes. The report was adopted, and the boys now feel that they have an ironclad constitution and by-laws which will stand the weather of their most enthusiastic meetings. Twelve new names were proposed for membership.

THE ST. LOUIS ALUMNI.

The Alumni of the St. Louis College of Pharmacy is now putting the finishing touches on the arrangements for their grand moonlight excursion on the steamer City of Vicksburg, Thursday, 10th inst. Many of the leading druggists, as well as physicians of the city, have announced their intentions to attend. The poor imposed upon drug clerks, who will be obliged to look after the stores that evening, are consoling themselves with the thought that their turn comes next—August 8. At the last regular meeting of the Alumni Association it was decided to employ a stenographer to report their scientific meetings, which are held monthly through the winter season. The object of this is to have the proceedings printed in pamphlet form for distribution among members and their friends.

THE PHARMACY BOARD.

The Missouri Board of Pharmacy met at Sedalia on July 9th and examined twenty-two candidates, of which the following passed and received certificates of registration: F. A. Eckdahl, Emporia, Kan.; A. A. Flanders, St. Louis, Mo.; J. A. O'Daniels, Hunnewell; F. A. Howard, Tipton; J. C. Hoshaw, Filmore; A. J. Hert, Joplin; Chas. S. Roth, California; H. G. Russell, Lexington; E. E. Starrett, Stanberry; O. H. Tisdale, Sweet Springs.

NEWS ITEMS.

Hugo Ewing is now installed as head clerk at Martain's Pharmacy, Manchester Road and Choteau avenue.

Chas. E. Mengel, head clerk at the Olympic Pharmacy, is spending his vacation sojourning in the country.

F. W. Sennewald, secretary of the Missouri Board of Pharmacy, has gone North in search of cooler weather.

A. A. Flanders has opened a very attractive drug store at 18th and Market streets, opposite the new Union Depot.

W. R. Grant, pharmacist at Cabbinee and Olive streets, has just returned from a month's visit through the East for his health.

John A. Fritz, druggist, at Twenty-second and Benton streets, wears a happy smile while waiting on customers, as he has a handsome young bride up stairs.

Dr. H. M. Whelpley, editor of *The Meyer Brothers' Druggist*, spent the Fourth at his old home in Southern Illinois, catching the few fish he left there in his boyhood days.

Alexander Crucius has sold his drug store at Eighth and Souard streets, and is now doing relief work. He believes there is more money and less worry in clerkship than proprietorship.

Fred. Swift has just sold his store at Compton avenue and Chestnut street to Mr. Bartlett. Reports are that Mr. Swift will soon open a new store at Vandeventer avenue and Olive street.

Martin J. Noll, a St. Louis College of Pharmacy graduate, and now head clerk at Halpin's pharmacy, Grand and Olive streets, has just returned from a very enjoyable vacation in the country.

It is reported that George Paulus, a St. Louis College of Pharmacy graduate, is soon to open a handsome new store at Indiana and Festalozzi streets. Mr. Paulus has been doing relief work for some time.

Ed. H. Newland recently sold his store at Compton avenue and Olive street, to R. G. Henderson, a graduate of the St. Louis College of Pharmacy, class of '94. Mr. Newland soon leaves for Colorado for his health.

R. C. Barnes, proprietor of the Clinton Pharmacy, at Grand and Finney avenues, has just returned from his usual summer trip to Green Lake, Wis. He reports cool weather, good fishing and few mosquitoes in that locality.

Otto Claus, at 2825 North Nineth street, and O. F. Heitmayer, at 1800 South Broadway, are two St. Louis druggists who recently found time to go fishing at a suburban lake. Of course they caught more fish than they could bring home.

Wm. D. Hoeffken, a graduate of the St. Louis College of Pharmacy and a Ph.D. of the University of Strassburg, recently returned from Germany to accept a position as pharmaceutical and analytical chemist for the Meyer Brothers' Drug Co.

Thos. A. Buckland, a graduate of the St. Louis College of Pharmacy, for several years with the J. S. Merrell Drug Co., and now assistant city chemist, has just returned from a very pleasant vacation among friends and relatives at Kansas City and Marshall, Mo.

Emil Feickert, a Ph. G. of the St. Louis College of Pharmacy, class of '91, has been clerking in Chicago for the past two years, but has recently quit the drug business to accept a position as book-keeper for his uncle, Wm. J. Lemp, the big brewer of this city.

Chas. W. Nau, a Ph. G. of our College of Pharmacy and one of St. Louis' prospering drug clerks, was recently united in bonds of wedlock to Miss Annie Jawarsky, one of St. Louis' most charming young ladies. The happy couple have gone North on a short wedding tour.

J. W. Peeler, a prominent pharmacist of Fayette, Mo., was upon our streets a few days ago.

Mr. Van Ness has just sold the Knickerbocker drug store of 901 Manchester Road to Mr. E. J. Ernest.

Rudolph S. Vitt, head pharmacist for Prof. Francis Hemm, recently returned from his vacation trip by boat to Keokuk, Ia.

One of the wholesale drug firms of this city has just made a ten per cent reduction in the salary of all of their employees.

Mr. Miller, who has been clerking for Prof. Good, Jefferson and Olive street, has just returned from a very pleasant vacation.

The prospectus of the St. Louis College of Pharmacy has just made its appearance. It shows the usual improvement over the previous issues.

O. F. Heitmeyer, druggist at 1800 South Broadway, recently cashed a \$28.50 check for a young man, to find a few moments later that it was bogus.

Wirt P. Hicks has resigned his position as prescription clerk at the dispensary of the City Hospital, and is now journeying through the South for his health.

Chas Koenek, proprietor of the City Hall drug store, Twelfth and Chestnut streets, has just returned from an extended bicycle tour through this State.

Theo. Crucius, who for some years has been located at Thirty-fifth and Market streets, recently moved his stock of drugs into a more commodious building at 8401 Market street.

Wm. Barron, one of our college of pharmacy graduates, is now installed as prescription clerk, filling the vacancy caused by the resignation of Mr. Hicks at the dispensary of the City Hospital.

W. H. Lemmone, head clerk at the City Hall drug store, departs in a few days on his summer vacation. He expects to spend a number of days in Chicago, and the remainder of his vacation at Louisville, Ky.

A young colored man recently entered a down town drugstore and asked the clerk for a "bildudle." The clerk is a full-fledged "Ph. G." but he never heard of a "bildudle" before, so he questioned the customer as to what he wished to use it for. The gentleman of color said: "It am one of dem things dat goes all round in front." The clerk finally wrapped up a suspensory bandage and he left the store with it only to return a few moments later, when he said very indignantly: "Die lady cant use dis thing. She wants a *genuyne bildudle* and nuffin else and here she has done written it out for you." The clerk took the slip of paper on which were written the words, "belladonna porous plaster." The young druggist immediately added a new word to his vocabulary.

Death of Felix Lyneman.

F. A. Lyneman, secretary of Colorado Pharmacal Association died in Denver, June 19th from a stroke of apoplexy. He had been in his usual good health up to the day of his death. He complained of a slight headache and pain in left side, but neither he nor his family were alarmed for it.

Just before dressing to go downstairs to his breakfast he entered the bath room and was found shortly after by his wife, just as he was stricken and unconscious and lived only a few hours afterwards.

The deceased was a graduate of the Philadelphia College of Pharmacy and a

member of the American Pharmaceutical Association.

He has been secretary of the Colorado Pharmacal Association since its organization, having been twice re-elected to the office.

He was proprietor of two pharmacies in Denver at the time of his death, and was one of the most genial, kind-hearted and loyal of men.

He was 87 years of age and was a native of Richmond, Va., and born of German Catholic parents.

The druggists of Denver attended his funeral in a body.

Pharmaceutical Association of the Province of Quebec.

At the first meeting of the new Council of the Pharmaceutical Association of the Province of Quebec, held July 4, the election of officers took up the greater portion of the meeting and resulted as follows: President, Joseph Contant; first vice-president, R. W. Williams; second vice-president, W. H. Chapman; treasurer, Alex. Manson; Major and Minor Board of Examiners, S. Lachance, W. H. Chapman, J. R. Perkin, Montreal; R. W. Williams, Three Rivers; A. E. Duberger, Waterloo; preliminary examiners, Prof. A. Leblond de Burmath, Isaac Gammell, Montreal; Supervisor Quebec examinations, Mr. A. Larue; auditors, Messrs. L. A. Bernard and R. H. Bryson; secretary, registrar and assistant treasurer, Mr. E. Muir.

PRELIMINARY EXAMINATIONS.

The quarterly meeting of the preliminary Board of Examiners of the Pharmaceutical Association of the Province of Quebec, was held in the Montreal College of Pharmacy, 595 Lagauchetiere street and Lural University, Quebec, Thursday, July 5th. Thirty-six candidates presented themselves in Montreal and seven in Quebec, and of these the following passed in order of merit:

J. Vaschereau, J. O. Mathien, A. Arcand, G. Richard, V. F. Forges, O. Robert, R. J. Taylor, A. Lord, O. Thibault, O. H. Tansey, G. P. Plamondin, T. E. Gaynor, J. A. Gaynor and L. Achille Roy.

The following candidates passed on all subjects but arithmetic namely:

Percy E. Jones and E. Jacotel will have to present themselves for that subject in October next. The remainder of the candidates are referred back for further study, and will be required to take up all subjects, should they again present themselves. The subject of the examinations are: English and French grammar, English and French translation, Latin, Arithmetic, History and Geography.

The preliminary Board of Examiners are Professors A. Leblond de Burmath and Isaac Gammell, with Mr. A. Larue of Quebec as supervisor of examinations for Quebec City and district.

The next examination will be held on the 4th of October, and candidates are required to give ten day's notice of their intention to present themselves. This rule is strictly carried out.

FOREIGN NEWS NOTES.

Besides the diploma of honor awarded to Messrs. Burroughs, Wellcome & Co. of London at the Vienna Exhibition, they have since been advised of the award of a gold medal in the Military Section. At the Venice Exhibition they have obtained the diploma of honor and the gold medal.

There was a story told recently that strikingly illustrates the consideration for others which distinguished President Car-

not. A young Englishman was gaining experience in his calling as a pharmacist in a large pharmacy in Paris, at which M. Carnot was a customer. On one occasion he came in to order a *tisane* for Madame Carnot, who was ill, and gave his order to the English assistant. He in the press of work forgot all about it, and was much disturbed when he saw the President walk into the shop in the evening. Naturally, he expected that a complaint would be made to his employers, and that he would at once be reprimanded. M. Carnot, however, quietly looked round till he found the assistant in question, and then calling him aside inquired into the matter, and in his characteristic way readily accepted his apologies.

The *Pharmaceutische Zeitung* calls attention to a scheme which is now on foot for the formation of a "Trust" of certain large glass factories in the Kingdom of Saxony and in the Prussian provinces of Silesia and Brandenburg. The scheme is practically, says our contemporary, a revival of an attempt at forming a combination started in 1891, under the auspices of Mr. Lessenberg, the British Consul at Rostock. At that time the negotiations miscarried, as the inducements held out to the works were not sufficiently alluring. The present scheme appears to be conceived in a more liberal spirit, and is being matured with great secrecy. A "Mr. John Young of London" is acting as the agent of the, as yet, anonymous British capitalists. He offers to buy up the works, which his principals desire to secure on the following terms: Half the purchase money to remain as a mortgage on the factory, bearing 4½ per cent. interest, one-quarter to be paid in cash, and the remaining quarter in shares of the company to be formed. The stock and raw material to be taken over at a market value for cash. The capital of the new company is to consist of the aggregate amount paid for the works, a working capital to be fixed by the London financiers, and a founder's profit of 20 per cent., against 25 per cent. suggested in the 1891 scheme. The works must bind themselves to the promoters until October 1 next.

The Sicilian correspondent of the *Chemist and Druggist* writes: "The Italian government, being desirous of encouraging the preparation in Sicily of citric and tartaric acids, especially the former, has issued a decree offering prizes to persons who shall open factories for the preparation of these acids in Sicily. The first prize is to be one of 500l., the second of 350l., and the third of 175l. sterling, in addition to which small bonuses will be given to the managers of works. To obtain the first prize both citric and tartaric acid must be made, the former in a quantity of at least ½ ton a day. Preference will be given in the competition to those firms making their own sulphuric acid, for the production of both citric and tartaric acids. It is also laid down as a guide to the jury that they are to give the preference to those making the best use of subsidiary products, and those using vacuum apparatus, or apparatus made of enamelled iron or porcelain for evaporation. Applications for the prizes must be made on Italian stamped paper not later than December 31, 1895, and the works must be in operation not later than February, 1896, in which year the prizes will be distributed by the Minister of Agriculture. The competition appears to be open to foreigners. There are already two works in operation in the island."

Notes on Prices.

Wholesale Druggists' Prices.

The following paragraphs chiefly relate to the more important of the changes which have taken place in the prices at which goods are purchased by retailers in ordinary lots, in the interval since our last issue:

ALCOHOL, grain, has advanced from \$2.26 @ \$2.40 to \$2.34 @ \$2.50. Cologne is also higher being quoted \$2.45 @ \$3.45.

ALOES, powdered socotrine, is in better supply and lower at 50 @ 60c.

BISMUTH SUBNITRATE and SUBCARBONATE are lower; the former is now quoted \$1.50 @ \$1.65 and the latter \$1.75 @ \$1.85.

GUARANA, powdered, has declined from \$1.85 @ \$1.50 to \$1.25 @ \$1.40.

GUM ARABIC has declined to 55 @ 60c., the previous quotations being 65 @ 70c.; powdered has declined from 75 @ 85c. to 65 @ 75c.

OPIUM is lower and offers at \$2.10 @ \$2.30.

Changes in Prices.

In their prices current dated for July 2, Powers & Weightman and Rosengarten & Sons, Philadelphia, note declines in prices in acetone acid, salicylic bismuth preparations. Chloral hydrate, beechwood, creosote, glycerin, lithium salts, morphine acetate, muriate and sulphate, pulvis antimonialis, salicinus, sodium salicylate and strontium salts, atropine, and ammonia preparations are higher.

Chemicals.

The Roessler & Hasslacher Chemical Company, 78 Pine street, New York, in their July circular refer to the past month's business as moderate and changes few. Special lines are referred to as follows:

ANILINE OILS AND SALT are unchanged since our last issue, and aniline salt especially continues in good demand.

HYPOSULPHITE OF SODA is higher and scarce.

OXALIC ACID in second hand is firm, and with a continuation of the present good demand we have good prospects of still further improvement.

OXIDE OF TIN.—Although not of paramount importance to the drug trade, it is handled more or less by all dealers.

Advances are noted in red arsenic and hypsulphite of soda.

Review of the Wholesale Market.

NEW YORK, July 23, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

The business in drugs, dyestuffs and chemicals has been of a very light and unsatisfactory character during the interval which has elapsed since our last report. The jobbers report a fair steady inquiry for supplies from dealers at interior points, but importers complain of an absence of demand for quantities, and the market presents in consequence no feature of strength or activity. Though the statistical position of many imported staples is not encouraging to importers and large holders, there is yet no lack of confidence in the situation, as with an anticipated

revival of general business higher values are looked for, and the disposition is general to give the market a steady support. The more important fluctuations are tabulated below, as follows:

ADVANCED.	DECLINED.
Alcohol.	Opium.
Ethereal preparation.	Snake root.
Acetate of lime.	Lycopodium.
Canary seed.	Senega root.
Dandelion root.	Cardamoms.
Matico leaves.	Sugar of lead.
Quinine.	Cocaine muriate.
	Bismuth preparations.

DRUGS.

ALCOHOL has been again advanced by the Trust, the range now being \$2.80 for car-load lots; \$2.82 in 10 bbl. quantities, and \$2.84 for single barrels; all these prices being less the usual rebate of 7c. per proof gallon, or 18 16-100c. per wine gallon.

ARNICA FLOWERS are firmer at 9½ @ 11c. with a moderate inquiry at this range.

BALSAMS.—Copaiba, Central American, offers in instances from importers at 32½ @ 38c., but the demand at present does not expand beyond jobbing proportions. Fir, Canada, is quoted on spot \$2.25, but purchases of forward delivery goods have, it is reported, been made down to \$2.10 @ \$2.15. Tolu in a limited way may be obtained at 24c.; we quote the range at 25 @ 28c. Peru is steady at \$1.85 @ \$1.90.

BARKS.—Cascara Sagrada is in better supply and offering at 4¼ @ 6c. There is little doing in the other varieties, and no quotable changes in price are reported.

BURGUNDY PITCH is held and selling moderately within the range of 2¼ @ 2¾c.

CANTHARIDES are in better position with the current sales at 28 @ 30c. for Chinese, and 65 @ 75c. for Russian.

CACAO BUTTER, foreign, is generally held at 81 @ 81½c., with a fair inquiry experienced.

BUCHU LEAVES, short, offer freely at 8 @ 9c., though no special inquiry is reported.

CHAMOMILE FLOWERS, new crop, German, meet with a steady fair inquiry and numerous sales are reported at the range of 15 @ 20c. for spot goods, as to quality.

COCAINE MURIATE has been advanced 25c. per ounce by the foreign manufacturers, their quotations now being \$4.80 in ounces, \$4.85 in half ounces, \$4.90 in quarters and \$5 in eighths.

COD LIVER OIL, Norwegian, does not change from \$25 @ \$28 as to brand, though important demand is lacking. Higher prices are looked for as the season advances, and a better demand is felt.

CUBE BERRIES continues dull at nominally 18 @ 20c. for XX and 14 @ 15c. for ordinary X.

ERGOT is offered with increased freedom and at lower prices. We are reported a sale of 500 lbs. German, at 20c. The quoted range is 19 @ 21c., and Spanish 22 @ 24c.

COLOCYNTH, Trieste, has sold freely in the interval. Among other transactions we note sales of 1,000 lbs. at 28c. and 1,500 lbs. at 35c. We quote the range at 28 @ 35c. Spanish is held at 18 @ 22c.

GUARANA continues quiet at nominally 90c.

JUNIPER BERRIES are held and selling in a jobbing way at the range of 2½ @ 8c.

LYCOPodium continues dull, but the present range of the market, say 52 @ 54c., is sustained.

MATICO LEAVES have been inquired for to some extent, and we hear of numerous sales within the range of 18 @ 15c. for prime.

MENTHOL is in very limited supply and prices are hardening, \$5.50 @ \$5.60 now representing the quoted range.

OPIUM has marked a further decline since our last report, and offers to sell are made with increased freedom, without, however, stimulating much interest in the drug. The tendency of the market is toward still lower prices, and interest is likely to remain absent until the article assumes a more stable position. Single cases may now be obtained at \$1.87½, and it is even intimated that bids of \$1.85 would be entertained if submitted. Jobbing parcels are quoted \$1.90 @ \$1.95. Powdered is held and selling moderately at \$2.70 @ \$2.75.

QUININE is tending higher; London cables reporting an advance to 11¼d. for German. The market here is strong, and an early improvement is regarded among the certainties. Supplies of German are not openly offered at less than 28c., and for the more popular makes 28½c. is firmly required. Domestic makes are selling firmly upon the basis of 27½ @ 29c. as to brand.

SAFFRON, Valencia, is in fair demand and we note among other transactions, a sale of 100 lbs. at \$5.15. American is quiet at nominally 21 @ 25c. as to quantity.

SENA LEAVES are meeting with about the usual inquiry and the market is well sustained upon the basis of 5 @ 15c. for Alexandria as to quality.

TONKA BEANS, Angostura, are in good supply, but business is restricted owing to the advanced views of holders. First hands quote \$1.80 @ \$1.75 for new crop. Jobbers are asking \$2.00 for prime old in small quantities.

VANILLA BEANS continue in steady, fair jobbing inquiry, and the market is firm at \$6.50 @ \$13.00 for whole, and \$5.25 @ \$6.00 for cuts as to quality.

DYESTUFFS.

CUTCH continues in fair moderate request and values are sustained at the quoted range of, say, 4½ @ 5c. for bale goods, 5½ @ 6c. for prime, 6 @ 6½c. for block in boxes, 6½ @ 7c. for ordinary slab and 8½c. for MM.

DIVI DIVI is in small supply and closely concentrated; the price remains \$70 to \$75.

GALLS, Blue Aleppo, remain quiet, but the market is steady at 18 @ 18½c.

GAMBIER continues dull, and values are lower. We quote the range at 3¼ @ 4.

MADDER, Dutch, is quiet at 8 @ 10c. for the better grades.

SUMAC, Sicily, is held at the range of \$67.50 @ \$70.00 as to brand and quantity.

TURMERIC remains quiet with whole yet offered at the range of 8 @ 4c. as to quality and quantity.

CHEMICALS.

ACETATE OF LIME continues scarce and firm at \$1.00 @ \$1.05 for brown and \$1.65 @ \$1.70 for gray.

ALUM continues in moderate request with sales of lump at \$1.75 and ground at \$1.80 @ \$1.85.

ARSENIC, white, continues to find sale in small quantities at the range of $3\frac{1}{2}$ @ $8\frac{1}{2}$ c. as to make.

BISMUTH preparations have undergone a further material reduction since our last report, metal being now quoted \$1.40 @ \$1.50; ammonio-citrate \$1.60, nitrate crystals \$1.10, tannate \$1.70, subnitrate \$1.85 @ \$1.40, and subcarbonate and oxychloride \$1.50 @ \$1.55.

BLEACHING POWDER continues dull, though prices are without quotable change. German held at \$1.95 @ \$2.00 and English at \$2.00 @ \$2.25.

BLUE VITRIOL is firm, but important demand is absent. We quote the range at $8\frac{1}{2}$ @ $8\frac{1}{2}$ c.

COPPERAS is generally held at 60 @ 75c., and the current demand is being supplied at this range.

CHLORATE OF POTASH continues very dull, though prices are nominally unchanged.

CITRIC ACID is moderately active at the range of 40 @ 40 $\frac{1}{2}$ c. for barrels and kegs.

CREAM TARTAR is generally held at 17 $\frac{1}{2}$ c. for powdered.

NITRATE OF SILVER is held at the range of 41 $\frac{1}{2}$ @ 48c.

NITRATE OF SODA is generally held at \$2.20 @ \$2.25.

OXALIC ACID is scarce and held with increased firmness. $6\frac{1}{2}$ @ $6\frac{1}{2}$ is generally asked for quantity lots of German.

SAL SODA continues well sustained at $82\frac{1}{2}$ @ 85c. for domestic and 90 @ 95c. for German.

SAL AMMONIAC, white grain, is scarce and firm at 7 @ 7 $\frac{1}{2}$ c. for English and German.

ESSENTIAL OILS.

ANISE continues held and selling in a small way at the range of \$1.50 @ \$1.60, as to holder.

CAMPOR has sold recently to the amount of 2,000 lbs. at 7c.

CASSIA is in moderate demand and steady at $82\frac{1}{2}$ @ 85c.

CLOVE continues selling in limited quantities at the range of $52\frac{1}{2}$ @ 55c.

CITRONELLA is firmer with up to 27 @ 29c. quoted for native.

LEMON is higher in the Messina market, but values here are unchanged from 80c. @ \$1.35 as to brand.

ORANGE and other Messina essences are also firmer, but without quotable change in value.

PEPPERMINT, HGH is reported sold to the amount of 25 cases for export at about \$2.80. The open quotation of the market is \$2.85 @ \$2.90.

GUMS.

ARABIC is strengthening and prices are firmly sustained upon the basis of 11 @ 12c. for sorts.

ASAFCETIDA is quiet, but steady upon the basis of 23 @ 24c., for Calcutta goods.

CAMPOR continues in limited demand and steady at 36 @ 37c., for domestic and 85 @ 87c. for Japanese.

CHICLE remains quiet, but holders are not endeavoring to urge their supplies, 25 @ 27c. being firmly required by importers.

GAMBOGE is finding sale in moderate jobbing lots at 50 @ 52c.

GUAIAC is easier and sales are making at the revised range of 17 @ 22c.

MASTIC is firm at 60 @ 65c.

KINO continues selling in a small way at \$1.40.

SENEGAL is without important change either as regards price or demand.

SHELLAC continues inactive; important inquiry is yet lacking, though prices are nominally unchanged.

ROOTS.

ACONITE is held and selling moderately within the range of 9 @ 11c., as to quality.

DANDELION, new, German, is offering spot at 7c.

GINGER, Jamaica, continues in good jobbing request and firm upon the basis of 12 $\frac{1}{2}$ @ 14c. for unbleached.

GINSENG is quite actively inquired for, but the supply is yet light and business is restricted. The price is nominally \$2 @ \$3.

GOLDEN SEAL now offers in the market at 20c., but little inquiry is reported.

ORRIS, Verona, is held at the range of 15 @ 20c. for best goods.

SARSAPARILLA, Mexican, offers in instances at $8\frac{1}{2}$ c.; we quote the regular range at $8\frac{1}{2}$ @ $9\frac{1}{2}$ c.

SERPENTARIA has declined to 25c. for Texas.

SENEGA continues to offer from the West at 30c. for Manitoba laid down, and 31c. for Minnesota.

IPECAC is passing out in small jobbing lots at a lower range of say \$1.05 @ \$1.15 as to quality.

JALAP is inactive, but quotations are steady at the previous range of 19 @ 20c. for prime quality.

SEEDS.

CANARY has advanced to $3\frac{1}{2}$ @ $3\frac{1}{2}$ for Smyrna. Sicily held at $3\frac{1}{2}$ @ $3\frac{1}{2}$ and Dutch 8c.

CARAWAY is reported higher abroad but values here are unchanged. Purchases can yet be made at $6\frac{1}{2}$ c.

CELERY is unchanged from 18c., though no sales are reported.

CARDAMOM is easier with Malabar now quoted at 60 @ 80c. as to quality, and Mangalore at 55c. @ \$1.20.

FENNEL, German, is passing out to the trade in moderate quantities at $8\frac{1}{2}$ @ $9\frac{1}{2}$ c. as to quality.

HEMP, Russian, is steadily held at $2\frac{1}{2}$ c.

CORIANDER is offered sparingly at 9c. for spot goods.

MUSTARD, Yellow California, is improving in position, owing to the small available supply and prospective light crop. There is nothing offered at present below 4c.

Trade Notes.

Have you tried assayed demarcotized opium for making the demarcotized tincture? If not, write to Gilpin, Langdon & Co., Baltimore for a free sample of the drug with directions for using.

The manufacturers of Perry Davis' Pain Killer announce a material reduction in the price of this popular proprietary. Packages that previously retailed at 50c. have been placed at 25c. and \$1 goods at 50c.

Intending College of Pharmacy students will do well to procure a copy of the pro-

pectus of the Brooklyn College of Pharmacy before making a final choice. Address Chas. E. Knebel, clerk of the college, 899 Classon avenue, Brooklyn, N. Y.

The Mayell-Hopp Co., Cleveland, O., are kept very busy at present distributing the handsome envelopes which they send free of charge to all druggists who make application and mention the AMERICAN DRUGGIST. These envelopes are intended as wrappers for small packages, toilet articles, etc., and are referred to as being especially well adapted for the purpose.

H. Weinbagen, manufacturer of thermometers and hypodermic outfits of all kinds, advises druggists to get the manufacturer's quotations before purchasing. This is sensible advice which may be acted upon by sending a request on a postal card for his illustrated price list of new goods. Address H. Weinbagen, 22 and 24 North William street, New York.

Druggists who have failed to investigate the advantages of purchasing their "beef, wine and iron" in bulk from a reputable maker should hesitate no longer. They will consult their own interests by ordering Wampoles' which is sold by all wholesale jobbers, and the makers, Henry K. Wampole & Co., manufacturing pharmacists, 441 Green street, Philadelphia. See their advertisement in this issue.

Burroughs, Wellcome & Co., Snow Hill, London, who have done so much to bring the "Tabloid" form of preparation to perfection, have turned their attention to tea, and as a result they have introduced tea "Tabloids," which, for purity, convenience, and the prevention of waste, are both original and remarkably useful. To judge by the sample box sent us, these "Tabloids" are not only distinctly original, but will be very marketable.

Violin strings, guitar strings, harmonicas and musical sundries of this kind form a profitable side line which is growing in popularity among pharmacists. Frank A. Stratton & Co., 37 Howard street, New York, are distributing an interesting catalogue of these goods, containing numerous illustrations of the more popular specialties. You should send for one for use as a reference book. Druggists are frequently called upon to supply just the kind of sundries catalogued.

The druggist who keeps "Tyrian" rubber goods on sale need never fear for complaints from customers as to the quality of article sold. Referring to this, the makers—the Tyer Rubber Company, Andover, Mass.—state that the word "Tyrian" on druggists' rubber goods is a guarantee of their quality. The combination fountain syringe and water bottle which is advertised to the trade in this issue (front cover page), is an article which gives uniform satisfaction wherever introduced, and druggists who are careful to keep only the best should write for prices.

For those who seek attractive and paying novelties, the advertisement of McClellan & Patton in this issue, will have special attractions. Few preparations command so wide a popularity with the public as headache specifics and shampoo powders. McClellan & Patton offer to send supplies of their popular specialties in these lines to the value of \$4 to any druggist upon payment of \$1. The goods are sent, express paid, and accompanied with 50 samples with the buyer's business card printed on each. This is evidently a "hard time offer" and should not be neglected. In ordering, address, McClellan & Patton, 48 Maiden Lane, New York, and mention the AMERICAN DRUGGIST.

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We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 87 College Place, New York.

THE VIRTUES OF TOBACCO.

THE praises of the weed nicotian have been sung by poets and chanted by novelists, but it has remained for Dr. Jankau to add to the pæans of the *literati* the commendation of the scientist; for he has investigated the effects of smoking, and not only finds it allowable, but in many cases even advantageous. It is true that he condemns to abstinence from tobacco those suffering from diseases of the eyes, nose and throat, but he deems the use of the weed admissible, and even in some cases, positively beneficial in affections of the lungs and for syphilitics. In nervous diseases, no generalization can be made, as the character of the neurosis must determine whether or not smoking is permissible. In nervous heart-affections the smoke should always be filtered.

RE-REGISTRATION.

THE proposition advanced at the last meeting of the State association in regard to re-registration, merits careful consideration. The plan proposed was that in case re-registration should be adopted that it also embody membership in the State association, i. e., every registered pharmacist or assistant is *ipso facto* made a member of the association, without paying anything for the privilege. He therefore enjoys all the advantages of membership in the association. The fund accruing from the registration goes to the association treasury. All expenses of the board of pharmacy and association are to be paid from the common treasury. The published proceedings of the association are to embody, in addition to their usual contents, a complete list of the registered pharmacists and assistants, as well as a complete record of the doings of the board of pharmacy for the current year.

Now the points to be gained, are that the fund which will accrue from re-registration is sufficient to enable the board to do effectually the work which in the past it has been prevented from doing by the lack of sufficient funds.

It will also enable the State Association to carry out the plan of county organization which is now impossible for the same lack of financial support. The druggists of the state will then be able to see a direct benefit resulting to each legitimate dealer by the careful and effectual enforcement of the law. Only a small fee is necessary for the carrying out of this plan. The amount now paid as annual dues to the association would be ample for proprietors, and half the sum for assistants. This plan has been effectually carried out in other States, and is giving entire satisfaction. This pertains to the State board.

The idea is quite as practical, however, to unite the county boards existing in the cities with the State board for practical working purposes, without, in any sense, destroying the identity of any of the boards or interfering with their internal workings. This can be done by so amending all the laws as to bring the general provisions of the various laws into unison and leaving the local conditions intact. Let the fees go into the State Association treasury, which shall pay all the expenses of the

various boards, and the association privileges shall accrue to the registered pharmacists and assistants in the different localities alike. Then the State proceedings will contain a complete list of all the druggists in the State and the proceedings of all the boards. All this can be done without interfering in the slightest degree with the prerogatives of the various boards as they exist to-day. There are many minor advantages which would result to the pharmacists, and the boards would not be hampered, as they now are, in their efforts to carry out the provisions of the law.

We give in another column a valuable symposium of the views of a number of leading pharmacists on this subject,

AMERICAN CHEMICAL SOCIETY.

THE ninth general meeting of the American Chemical society will be held in Brooklyn on Wednesday and Thursday, August 15 and 16. The first session will be held at 10 A.M., August 15, in room 42 of the Polytechnic Institute. After the session, at 1.30 P.M., it is expected that a steamer will leave one of the wharves of the East river, taking the visitors to the New York side, where a lunch will be served at the mineral water establishment of CARL H. SCHULTZ. After lunch there will be an opportunity to inspect the manufactory, and then the steamer will proceed to the United States Artillery school at Willets Point, stopping at intermediate places of interest and returning to Brooklyn in the evening. The morning session on Thursday will begin at 9 A.M., and later in the day visits will be made to manufactories in the vicinity, returning in time for the address of Vice President NORTON before Section C of the American Association for the Advancement of Science at 4.30 P.M. Invitations have been received to visit various chemical establishments and places of scientific interest, and the local committee will arrange for such visits at convenient times during the two days appointed for the meeting of the American Chemical society, and the remaining days of the week, as the visitors who remain to participate in the meetings of the Amer-

ican Association for the Advancement of Science, will undoubtedly be glad to avail themselves of such opportunities. Among the places to be visited are the Smith Varnish company, Long Island City; Dr. E. R. SQUIBB's pharmaceutical and chemical laboratories; the Standard Oil company's refineries at Bayonne, N. J.; the manufactories of LISTER, BALBAUGH, BALLANTINE & Co. and steel works in Newark, N. J. The local committee of arrangements for the meetings of the American Association for the Advancement of Science, and the other bodies which will be in session in Brooklyn at or near the same date, has secured for all of these organizations railroad rates of one and one-third fare for the round trip to Brooklyn or New York and return.

THE REBATE PLAN SUSTAINED.

It has been questioned whether it was possible to make the rebate plan sufficiently strong to insure protection to its supporters without bringing it into conflict with the acts relating to the establishment and maintenance of trusts. It would seem that this important question has been settled definitely at last in the adjudication of the suit brought by J. D. PARK & SONS Co., of Cincinnati against the wholesale druggists of Cincinnati and against the secretary of the committee on proprietary preparations of the National Wholesale Druggists' Association. As chronicled in our news columns two weeks ago the case was dismissed with costs against the plaintiffs.

We reproduce below a circular which, has been sent out by M. N. KLINE, chairman of the committee named, to the rebate proprietors and wholesale dealers.

The friends of the rebate system will be glad to learn that in the suit of J. D. Park & Sons Co. vs the Wholesale Druggists, of Cincinnati, and the Secretary of this committee, after a hearing extending over four days, the court gave such decided indications adverse to plaintiff's claims that their counsel presented an entry dismissing the case, at the cost of the plaintiffs, which they were permitted to do under the code of the State of Ohio. The outcome of the suit plainly confirms the opinions which have been sent to the proprietors from time to time, to the effect that there can be no question of the proprietor's legal right to make such terms as seem to him proper, regulating and restricting the selling price of his goods, and that this committee is not committing any illegal act in informing proprietors concerning violations of contracts, and giving them information, enabling them to act intelligently in refusing sales to such parties as will not adhere to the conditions of rebate contracts. The counsel for the defense conceded to the court that the defendants were doing everything in their power to keep plaintiffs from getting goods, i.e., the N. W. D. A., through its committee, had a perfect right to employ, and did employ, every means in its power to find out where the goods were obtained and to advise the proprietor. This seems to leave the course perfectly clear

for us to persevere in the same line of work we have been pursuing for some time past, and if the proprietors will stand loyally and firmly by their terms, and if dealers will refuse to support, directly or indirectly, in any manner whatever, the firm engaged in attempting to break down the rebate system, the committee is safe in expressing the opinion that that system can be maintained.

Some prominent retail dealers have argued that the rebate plan was in reality calculated to foster cutting since it was by means of the rebates that cutters obtained larger discounts than did the regular trade. If the provision proposed by the Interstate Retail Druggists' League, which excludes all who sell at retail from the benefit of the rebate were adopted, the one objection to the plan from the retailer's standpoint would be removed.

A most encouraging feature of the case is the fact that Messrs. PARK & SONS Co. found it necessary to bring suit at all, for this indicates that in their effort to obtain goods they had been seriously hampered by the activity of the committee of the N. W. D. A. If this organization can accomplish so much there is no adequate reason why the retail trade cannot also organize, so as to gain for themselves the protection which the jobbing trade have succeeded in securing on proprietary goods. The League is being organized and conducted on the right plan. Such improvements in prices as have been secured in towns that have been well organized have not been so large as to induce an element of weakness. It is thoroughly understood that every druggist in the league will immediately meet any cut that may be made. Consequently there is nothing to induce the practice of cutting. The lack of interest manifested so far in some sections, while it militates against the fullest success of the League does not altogether destroy the usefulness of the local organizations. The success of the N. W. D. A. should certainly stir us to a more energetic effort on behalf of the League.

THOUGHTS ON THE STRIKE.

FROM a valued correspondent in Chicago we are in receipt of a forcible communication bearing upon the recent labor troubles in that city in which the remarkable organization displayed by the strikers is contrasted with the lack of fraternal union which proves so great an obstacle to organization among the pharmaceutical fraternity. He comments upon the indignation aroused in certain circles East, because of the PULLMAN Co.'s flat refusal to entertain propositions looking to arbitration between employers and employees. And in this connection directs attention

to the recent happenings in St. Paul where DEBS inaugurated and brought to a conclusion the strike on the Great Northern Railroad. The President of the road it seems weakened, submitted to arbitration, and the strike was called off. The railroad authorities were soon, however, confronted, with a new difficulty—the strikers insisted upon the re-employment of those of their members who were out on bail awaiting trial for destroying railroad property and other charges. MR. HILL the president of the railroad company remonstrated, saying that the demand was unreasonable and compliance could not be expected. The arbitration committee composed of select business men of St. Paul was then called in and gave it as their decision that the railroad company must accede to the demands of their workmen and take back into their employment the strikers who had been guilty of the offenses named. "After such a result" comments our correspondent, "who can blame the PULLMAN COMPANY for refusing to listen to any proposals looking to a settlement of the strike by means of arbitration."

Our correspondent touches upon the talent for organization displayed by these uneducated switchmen and coal heavers, contrasting it with the weakness of pharmacists in this respect; but the vigor of his comparison will be lost unless we quote his own words. He says:

"The retail druggists of the country submit to almost any kind of treatment by the jobbers and manufacturers, and almost invite the public to kick them around as their body servants. They seemingly work for glory. Whenever an attempt is made to organize the profession so that by concerted action life may be made more endurable, this great profession has not got as much snap and get-up as the railroad coal heavers and switchmen. It would be carrying owls to Athens to tell of the chains of slavery which the profession have apparently delighted in putting around their limbs and even souls. In my judgment, every effort for organizing the profession into a solid body has failed lamentably.

"When druggists come together for the purpose of organization they become entangled in telling what happened in *my* store—and in *my* store—and in *my* store—and everybody seems afraid that if I inaugurate a certain policy in *my* store that I will not adhere to *my* policy—and on that account everybody promises to do a certain thing in *my* store—and when everybody gets home they do just the very reverse.

"I am like PULLMAN. He tried to create a humane status of living for his men and the thanks he got was—Boycott—and he is now sick and disgusted. And whom does he have to thank for all this misery? those infernal nuisances, the walking delegates! Nobody else! And I am certain that the walking delegates and self-appointed *Raisers of the Standard* have brought more misery to our ranks than they can ever atone for in this life or the next."

THE MEETING OF THE A. P. A.

FROM every section comes the news of warm interest being manifested in the approaching meeting of the American Pharmaceutical Association at Asheville, and everything indicates that it will prove a large and successful gathering.

A preliminary report of the Committee on Transportation of the American Pharmaceutical Association has been issued which reads as follows:

The Committee on Transportation for Delegates and visitors who desire to attend the meeting of the American Pharmaceutical Association, which convenes in Asheville in September next, herewith report that they have made a thorough investigation as to rates, routes, etc., and on account of the excellent through train and car service, and other facilities *en route*, offered by the Pennsylvania Railroad and the Southern Railway, Piedmont Air Line (formerly the Richmond and Danville), have decided on this as the official route from North and East to Asheville, N. C. A report as to the western territory will be issued as soon as the local members have perfected their arrangements.

The rates made for this occasion are one and third fare upon certificate plan, or if desired by members or visitors they can purchase round-trip tickets to Hot Springs, N. C., good to return for 90 days, with stop-over privilege at Asheville, or any other point on the line. The summer excursion rates from the principal points in the North and East to Hot Springs, N. C., are as follows:

From New York, via Pennsylvania R. R.	\$30.00
Sleeper to Asheville,	5.00
From Philadelphia, " " "	25.00
From Washington via Southern Railway,	20.00
Sleeper to Asheville,	3.00

The cost of these summer excursion tickets are about the same as upon the certificate plan. Where summer tickets are not on sale, purchase a ticket to Asheville, taking a receipt from the Ticket Agent for the money paid. On presenting this ticket countersigned by the Secretary, to the Agent at Asheville, a return ticket will be furnished over the same route at one-third the regular fare. The special rate is open not only to members, but also to any visitors who may choose to avail themselves of it.

See that your tickets read from Washington via the SOUTHERN RAILWAY "PIEDMONT AIR LINE," via Danville and Salisbury.

SPECIAL NOTICE.—Arrangements have been made so that parties holding tickets to Asheville or Hot Springs, via above route, can have same honored to return via Richmond, Va., and the York River Line up the Chesapeake Bay to Baltimore, giving an opportunity of going and returning by different route, so as to enable them to see the various sections of the Southern Country; or, those desiring to return by the same route and take a side trip to the Natural Bridge can do so. Arrangements have been made to sell round-trip tickets from Lynchburg to Natural Bridge, Va., at \$2 for parties holding excursion tickets via above route. Special through car service is being arranged to leave New York on the afternoon of Saturday, September 1st. 4.30 P.M., arriving in Asheville the afternoon of the following day, at 4.00 P.M.

ALTERNATE WATER ROUTE.—One of the handsome new steamers of the Old Dominion Line of steamers will sail from Pier 26, North River, at the foot of Beach street, New York, on Thursday afternoon, August 30th, at 3 P.M., arriving at Old Point Comfort at 10 A.M. Friday. Time will be given there to view the Fortress Monroe and the Indian schools at Hampton, to enjoy a surf bath and to take lunch at the Hygiea Hotel. At 4 P.M. the party will leave by rail for Richmond, arriving there at 6.30 P.M. A few hours can be spent in viewing the spots of historical interest in this city, the party leaving via the Southern Railway at midnight and arriving at Asheville on the next day, Saturday, at 4 P.M.

The fare for the round trip is \$28, which includes meals and state-room while on the steamer. The sleeper charge from Richmond to Asheville is \$3.00.

Those who contemplate taking the trip, and desire further information should address Alex. S. Thweatt, Eastern Passenger Agent, 271 Broadway, New York, or any member of the Committee.

CASWELL A. MAYO, Chairman, 37 College Place, New York.

HARRY SHARP, Atlanta, Ga.

S. A. D. SHEPARD, Boston, Mass.

A. E. EBERT, Chicago, Ill.

W. J. M. GORDON, Cincinnati, Ohio.

CHARLES M. FORD, Denver, Col.

A. K. FINLAY, New Orleans, La.

M. W. ALEXANDER, St. Louis, Mo.

WM. M. SEARBY, San Francisco, Cal.

New York, August 1, 1894.

A QUEER CURE.

THE *Indiana Pharmacist* gives the following as the best remedy "we have seen lately" for tapeworm.

The patients eats "a hearty supper" and breakfast and at 10 o'clock A. M. commences "taking this":

Chloroform 3 drams.
Mucilage acacia to make..... 6 ounces.

Take two ounces every hour. Then at 1 o'clock P. M. commence taking this:

Croton oil..... 6 drops.
Sugar of milk..... 24 grains.

Mix it. Caps. No. 6.

Sig. One every half hour.

The editor tries to convey the impression that some poor fellow survived this treatment, but fails to give particulars. Without reference to anything that went before, we are told that "he ate crackers and cheese with each dose of medicine, only took four of the capsules and captured the worm entire, six-five feet long." The "six-five" is evidently a misprint for sixty-five, but was the patient a horse or a human being?

PEPPERMINT ADULTERATION.

THE New York *Sun*, which is usually very accurate in its technical information, has been led into giving in a recent Sunday issue some new and curious information concerning peppermint oil and its adulterants. The following is a sample:

"Wayne County oil goes to market absolutely the pure expressage of the peppermint plant, but in the hands of dealers it is adulterated with Japanese menthol, pennyroyal and other inferior essential oils. The wholesaler makes two pounds of oil out of every one he receives from Lyons, N. Y. The retailer makes six pounds out of every one he buys from the wholesaler. Say the farmer gets \$2 a pound for his oil. The wholesaler may sell the same oil for \$2 a pound and yet get \$4 for it. The retailer may dispose of it at the same rate and get \$12 for it."

The person who conceived the above is wasting his talents as a space-writer—his path lies plainly in the field of legitimate fiction.

A DESCRIPTION of a process for making a patented article, the Supreme Court of the United States holds, in *SEABURY & JOHNSON, v. AM ENDE* (14 Sup. Ct. Rep. 683) is sufficiently clear and definite when expressed in terms intelligible to a person skilled in the art to which it relates.

Syncope Treatment.

The following measures are recommended in cases of syncope by *La Tribune Médicale*:

1. Keep the patient in a horizontal position until circulation, sensibility, and consciousness have been fully restored. Open the windows, remove all ties, scarfs, corsets, and belts. Rub with cold water slightly aromatized with lavender spirit or cologne water.

2. Cause the patient to inhale acetic acid or 3 to 4 drops of amyl nitrite poured upon a handkerchief.

3. Give a subcutaneous injection of ether, or of caffeine, according to the following formula:

	Parts.
Caffeine.....	1
Sodium benzoate.....	1
Distilled water.....	3

Written for the American Druggist and Pharmaceutical Record.

CURIOSITIES OF ANCIENT MEDICINE.

BY ANDREW T. SIBBALD.

Modern and Ancient Pharmacopœias Contrasted—Herbs to Detect the Guilty—
Queer Treatment for Ague—Harsh Cure for a Mind Deranged—Quaint
Conceits—Swan's "Speculum Mundi"—Rosemary's Place in
Ancient Medicine—A Charm to Recover Lost Youth.

REMARKABLE for their ingenuity, if nothing else, were many of the measures resorted to by our forefathers in routing the fell demon of disease; and to the modern—and therefore enlightened—reader an ancient "medicine book" is a perfect mine of curiosities, in which he may find sense and nonsense, ignorance, and a certain amount of shrewdness, blind faith, and barefaced quackery, all served up by turns, or, it may be, together. The Pharmacopœia of our ancestors was both richer and poorer than ours of the nineteenth century. The former rejoiced in a collection of "leechdoms," which would be enough to make the hair of any modern patient stand on end, and give the College of Physicians the shivers. Where science halted and medical knowledge looked blank, inventive superstition stepped boldly to the front, and bade this charm be repeated for an ague, and that one for a broken bone, prescribed a drink of herbs and holy water for a fever, and the wearing of a specified amulet for the gout. In all "cures" resulting from those mild remedies, Faith was no doubt the most active, though probably the unsuspected agent. It certainly speaks volumes for the constitutions of our forefathers that they so frequently got the better of their ailments in spite of the pranks they played with themselves. The old stock was apparently after the pattern of Joe Bagstock, "Tough sir, devilish tough;" and we, the descendants, though chips of the self-same block, have lost in hardness what we have perchance gained in polish. It was not only to the sick body, but also to the "mind diseased," that the leeches and wise women of bygone days attempted to minister, with their potions and their nostrums. With beautiful impartiality they drew no hard and fast line between peevishness and palsy; the "vanities of the head," whatever they might be, and the disorders of the liver, they were as ready to "fix you up" with something good, against the effects of witchcraft, or the temptations of the Evil One, as to dose you for the measles, or to teach you a charm to discover the whereabouts of lost cattle. Magic in a mild form being the unknown and ungaugable X of most of their compositions, it was as easy to attempt one thing as another, the result being in all cases a matter of chance.

HERBS TO DETECT THE GUILTY.

In Cockaigne's "Saxon Leechdoms," we are told that Demokritos wrote of a herb, the root of which "wrought into pills and swallowed in wine, would make guilty men confess everything, tormented at night by strange visions of the spirit world." What an herb for

a court of justice! What a stimulating little dose for a criminal likely to get off for want of evidence. Then Albertus Magnus trots out the heliotropion, and it appears that the heliotropion is also an invaluable herb, good for defeating the ends of those who go a burgling. "If one gather it in August," says Albertus, "and wrap it up in a bay leaf with a wolf's tooth, no one can speak an angry word to the wearer." This is very good, first rate indeed, but that is not all. "Put under the pillow, it—that is the heliotropion—will bring in a vision before the eyes of a man who has been robbed, the thief, and all his belongings." Why, oh why, when jewel robberies occur so often, do we not pay more attention to the wonder-working heliotropion! Betony, we are told, protects a man from "monstrous nocturnal visitors and frightful dreams;" in other words, it keeps away nightmares. It also prevents intoxication; so also does an omelette made from the ears of the long-eared owl.

QUEER TREATMENT FOR AGUE.

Among numberless other prescriptions for the ague, there is one which declares that "the little animal that sits and weaves with the view to catch flies, tied up in rag round the left arm," is to be recommended as a certain cure. Flemish folk-lore, on the other hand, dictates, in the case of ague, an early morning visit to an ancient willow tree. When there, the sufferer must tie three knots in one of its branches and say: "Good morrow, Old One; I give thee the cold; good morrow, Old One;" upon which the accommodating "Old One" relieves the patient of his troublesome complaint. The somewhat unchristian doctrine of "pass it on to somebody else," is noticeable in many once popular charms. To get rid of warts, a good plan was to wrap up in a parcel as many grains of barley as there were warts to be charmed away, and to leave it on the public road. Whoever found and opened the parcel, inherited the warts; a "heritage of woe" in this instance.

HARSH CURE FOR A MIND DERANGED.

Persons bereft of their senses fared badly in the so-called good old times. "In case a man be lunatic," says a cheerful "leechdom," "take skin of a mere swine or porpoise, work it up into a whip, swing the man therewith, soon he will be well. Amen." The amen gives a peculiar unctuousness to the prescription. Nor was the rod of benefit to lunatics only, for the Rev. S. Baring Gould writes of a German physician of 1608, who apparently deemed it a cure for pretty nearly every sort of ill the flesh is heir to. According to

this enthusiast a sound thrashing was better than any patent medicine invented since the days of Noah. It "cleared the brain, stirred up the stagnating juices, circulated the blood and braced the nerves;" moreover, for the melancholy that resulted from love, it was simply the cure. What would the sighing Strephons and languishing Adonises of the nineteenth century say to having their love sickness doctored in this summary and unsentimental manner. "Whip him well," remarks the sage, speaking of a youth, "down" with the amatory complaint, "and should he not mend immediately, keep him locked up in the cellar on bread and water until he promises amendment."

QUAINT CONCEITS.

In Swan's "Speculum Mundi" we also come across some very quaint medical conceits. Feverfew, we learn, is good for "such as be sad, pensive, not desiring to speak;" the herb sowbread is a capital "amorous medicine," and will cause you to fall in love, while as has just been observed, a judicious application of the rod will make you fall out. A sly waggishness lurks on the description of the mustard, and the author on this occasion drops into poetry—

"She that hath hap a husband bad to bury,
And is therefore in heart not sad, but merry,
Yet if in shew good manners she would keep,
Onyons and mustard seed will make her weep."

ROSEMARY'S PLACE IN ANCIENT MEDICINE.

It would be a shame if we omitted to place rosemary on the list of strange and wonder-working herbs, for, indeed, the virtues of rosemary were formerly very great, although now they appear to have fallen into abeyance. The materialism of this century has certainly much to answer for. It has taken away our charms and our philters, it has put to flight our familiar fairies, and dispersed most, if not all, our hobgoblins; it has removed the ancient landmarks and dealt a death-blow to the old superstitions. In return it has given us what a well-known writer has been pleased to designate "machinery," by which he means a vast deal more than engines and things with wheels that "go round." However, what machinery is or is not, has nothing to do with this paper, which deals merely with a few of the uprooted landmarks; so to return to our rosemary. If hung about the porch, and doorposts, it kept away thieves; but its most remarkable property consisted in making old folks young again. Precious, precious rosemary; could you but accomplish that now, gold of Ophir would be your price!

There was once—and Galen is our authority for this story—a gouty and crooked old queen, who, being minded to recover her lost youth and beauty took six pounds of the magic herb, and ground it in a "stownde." The powder thus obtained was mixed with the water in which she bathed three times a day, and the result was that she became so young and sprightly that instead of repenting her of her sins, and considering her latter end, her rejuvenated majesty began to look out for a husband. So much for Galen and his rosemary.

Another of our "common or garden"

plants which has lost its prestige in these degenerate times is the periwinkle. Such a list of virtues as it possessed, too! Not only was it "of good advantage" against evil spirits, snakes, wild beasts, poisons, envy, and terror; but those who wore it were prosperous and ever

acceptable. Truly a "consummation devoutly to be wished!" Prosperous and ever acceptable! Old Herrick could never have known this, or surely, he would have written:

"Gather ye periwinkles while ye may:
Old Time is still a-flying."

RE-REGISTRATION—A SYMPOSIUM.

THE great interest which attaches to the important question of re-registration has led us to obtain the views of a number of leading pharmacists throughout the United States on this subject. Below we publish the opinions expressed by a number of the more prominent pharmacists and members of the boards of pharmacy of this country in response to our request.

Re-Registration a Success in Rhode Island.

By W. E. CATES.

PROVIDENCE, R. I.

Secretary of the Rhode Island Board of Pharmacy and Registrar of Pharmacists.

I believe that the best way of raising the necessary funds to conduct the business of State Boards of Pharmacy, is by annual re-registration such as we have in Rhode Island. By this means, a sufficient income is obtained, and it also enables the Board to keep track of its licentiates. Our fee for examination is \$10, and an annual fee of \$1, due the first of July each year, when a new certificate of registration is issued good for the current year.

Relief Needed in Pennsylvania.

By CHARLES T. GEORGE,

HARRISBURG, Pa.

Secretary Pennsylvania Board of Pharmacy.

It is a fact that the Pharmacy Board of this State is sadly in need of money to prosecute violators of the pharmacy act. Numerous complaints are made of violations against every section of the law. The board does all it can, frequent prosecutions are made; but it is not what it should be. The prosecutions are not, and cannot be (under existing circumstances), what the people and the law-obeying pharmacists of the State have a right to demand.

This board, however, is only permitted to charge for first examinations, and \$1 for re-examinations, and gets but 33½ cents a year for renewal of registration (\$1 every three years). With removals, deaths, changes in business, etc., the board has about \$3,000 revenue from this source every three years.

The examination fee never pays the expenses of an examination, and, of course, the board is compelled to draw upon this fund for that purpose.

The secretary receives a compensation of \$100 a year, when his compensation should be at least six times that amount.

The members of the board are compelled to work twelve and some times fifteen hours a day at a salary of \$5 per day, in order to keep down the expenses as much as possible.

I believe that the board could become a great power for good in this State if the examination fee was made \$5 and the renewal fee \$3 every three years (\$1 per year). Then the otherwise excellent provisions of our act against

adulterations and other violations could be prosecuted with certain success.

Re-Registration the Thing.

By EDWARD S. SMITH.

PORT HENRY, N. Y.

In your editorial of July 25, concerning the means to increase the revenue of the State Board of Pharmacy, there are embraced three propositions, of two only of which—higher registration fee and re-registration—I will speak.

It is my impression as I look at the two propositions that the one looking to a higher registration fee is simpler, affecting but one class of individuals with a single end in view, and that is the Dollar. The Legislature will not, however, look with favor upon any proposal to place obstacles in the way of an individual aspiring to enter into the practice of pharmacy. The question also may be asked, Will a higher registration fee, of say \$15, strengthen the State Association in membership—intellectually or socially? The question should be asked, because we must remember that the hope of our association and its members lies in the present and the future, not in the past.

Now re-registration, is evidently the most feasible plan so far proposed. Its adoption will result in increased revenue to the Board and membership to the State Association. It will bring about better social relations among the druggists of the State, and assist materially in the recognition of the Constitution of our Association, Article II. of which reads:

The aim of this Association shall be to unite the reputable Apothecaries and Druggists of this State for mutual assistance, encouragement and improvement; to encourage scientific research; to develop Pharmaceutical talent; to elevate the standard of professional thought, and ultimately to restrict the practice of Pharmacy to properly qualified Apothecaries and Druggists.

We all must recognize a system whose fundamental principles are recognized by our national government. I would recommend the division of the State into four collectorial districts as is done by the Internal Revenue officer of the Government. When by this system the national government can collect millions from all over the United States, why can we not collect a few thousands in one State?

A Gross Injustice.

By JAS. HERON,

BROOKLYN, N. Y.

On reading your editorial on "higher license or re-registration," I wish to say that in my opinion it would be a gross injustice to those who have already passed their examination to pay a yearly due. Now I believe the best way to meet all

obligations of the State Board of Pharmacy would be, to say, charge each candidate \$10 for examination instead of \$15, and \$5 for his certificate if he passes. What drug clerk would object to pay \$5 after he passes a successful examination

Unite the Board with the Association.

By WILLIAM B. THOMPSON.

Philadelphia, Pa.

With regard to the best method of financially sustaining the "State Boards of Pharmacy" I should not favor increasing the fee for registration, or, of requiring that it be made annual. If you will privilege me to proceed further, would say, that by allying the State Examining Boards of Pharmacy to the State Associations, a more intelligent control and direction would be given to the operation of the Boards. Self-constituted, or even official bodies acting independently of each other is not a wise proceeding. Vest the appointing power to the Examining Boards in the hands of the State—but provide that names submitted shall have the endorsement of the respective State Associations. This places a definite responsibility, and relieves appointments of, at least, a semblance of political preference. Under these circumstances the two bodies being amicably related, the State Associations would be willing to sustain the State Boards by appropriations of money, (see Proceedings of Penna. Pharm. Assoc. 1894)—not only to carry on their functions proper, but what is of equal, and vital importance, to enable the State Boards to enforce the provisions of enactments against falsification, and adulteration of drugs and medicines, which enactments are now part and parcel of all framed pharmacy laws. We desire the entire control of the interests of the drug business retained in the hands of the druggists. We assume that the State Associations represent the intelligence of the trade. Pharmacy laws have come to remain—Let us strive to uphold them.

Re-Registration a Success in Wisconsin

By E. B. HEIMSTREET,

Secretary of the Wisconsin Board of Pharmacy.

The Wisconsin Board has never been short of funds since it was organized in 1882, has always had a balance in its treasury. We pay annual registration fees, viz.: first grade certificates, \$1; second 50 cents. The boys all pay up promptly and we get many letters of congratulation on the way the law works. From my experience as secretary of the Board for the past eleven years, and from what I gather from journals, Wisconsin has one of the best pharmacy laws and the pharmacists are on better terms than any State in the Union.

Let the State Support the Board.

By W. R. OGIER,

Columbus, Ohio,

Secretary of the Ohio Board of Pharmacy.

The question of revenue for the necessary expenses incident to pharmacy

laws and their enforcement, is one that has given the Board of Pharmacy in this State not a little concern.

Our renewals are triennial, and for the small sum of one dollar, and the fees received from registrations, renewals and examinations are not sufficient to pay the actual expenses of the board, to say nothing about any attempt to enforce the requirements of the law against those who are engaged in violating it.

If the pharmacist is to pay for the support of boards of pharmacy, and the enforcement of pharmacy laws, then he should pay a fairly liberal fee and be registered for life. The pharmacist, however, should not be obliged to pay the entire expenses of boards of pharmacy. This theory is wholly wrong. If pharmacy laws have any place what-

ever, they are made for the general good, and the people should foot the bills. If they are not worth to the citizens of the State the amount of their support, they should be repealed forthwith. As a matter of fact, the pharmacist derives very little benefit from the enactment of pharmacy laws. If they are made in his interests alone they should be speedily unmade. Why, then, ask him to pay for something the benefit of which accrues to others? Because all such laws have been made at the instance of qualified pharmacists, who desired to have competent men only in such responsible relationship, the current opinion is that the pharmacist must pay the tax. Let the State support boards of pharmacy or abolish the laws.

satisfactory results in all cases where iodoform is ordinarily employed:

Corrosive sublimate.....	1-1 grain
Boric acid.....	3 j
Tannic acid.....	to grains
Milk sugar, sufficient for.....	3 ij

1 grain of corrosive sublimate in this mixture gives a 1:5,000 trituration of bichloride, and 1 grain, one of 1:3,000. The sublimate should be mixed very gradually and thoroughly with the milk sugar,—the other ingredients being slowly added one by one, in order to obtain a uniform distribution of the bichloride. The author states that this powder is more reliable than any iodoform preparation and has no odor; the boric acid and milk sugar are both protective as well as antiseptic, and the milk sugar prevents, besides, the deterioration of the bichloride. The tannic acid may be omitted, in case its desiccating or styptic action is not wanted.

The Detection of Bile in Urine.—Dr. A. Jolles (*Zeit. f. Phys. Chem.*, xviii, p. 545), recommends the following method: 100 or 50 Cc. of the urine is acidulated with a few drops of HCl, mixed with barium chloride in excess, and is then well shaken with 5 Cc. of pure chloroform. The subsiding chloroform, with the sediment, is drawn off by means of a pipette and placed in a test tube. The chloroform is evaporated in a water bath at 80° C., and, after cooling, the remaining liquid poured off from the sediment. About three drops of concentrated HNO₃, (containing about one-third of fuming HNO₃) is allowed to flow upon the sediment and the formation of the colorings observed. By the use of 100 Cc. of urine the author could plainly determine 0.1 per cent. bile content. The test is twenty times as sensitive as Huppert's test.

The Antiseptic Properties of Oil of Cinnamon.—Dr. D. Braden Kyle has used the Ceylon cinnamon oil in the treatment of infective varieties of nasal, laryngeal, and aural affections, with marked success. He explains the action of the oil as follows: The germ being an albuminous compound, composed mainly of nitrogen, oxygen, and hydrogen, and being enclosed in a capsule of varying thickness, the chemical composition of which is cellulose, when brought into contact with the active principle of the oil, the cinnamic acid, has its cell-wall contracted, which practically deprives the germ of its nutrition. By microscopical examination this theory is confirmed. In cases in which the solution of the oil, 1.500, was put to the clinical test the wounds healed by first intention. However, it is not a safe antiseptic for surgical work, but it is a good mucous membrane antiseptic. It is not, however, a germicide.—*Therapeutic Gazette*.

Quinine Solvents.—The inconvenience and possible objection to adding sulphuric acid to quinine sulphate, for use in aqueous solution, is noted by Crousel in *L'Union Pharmaceutique* who has found a substitute for the acid in tartaric and citric acids, which are already used for preparing solutions of mercuric chloride for subcutaneous injection. These acids agree better with the digestive fluids; they are, besides, habitually ingested in the form of fermented bev-



Thyreoidinum Siccatum is the name which Merck has given to a preparation of the thyroid gland in a dry form. The preparation appears as a coarse, grayish-yellow powder of a characteristic odor. 0.6 grammes (9 grains) of this powder is said to represent a whole large fresh thyroid gland. The dose is given as from 0.1 to 0.3 grammes (1½ to 4½ grains).

Dermol.—This name is applied by Torjescu-Burdujeni to a preparation analogous to dermatol which is prepared by treating a bismuth salts with chrysophanic acid. The resulting salt is an amorphous yellow powder of a neutral reaction and insoluble in most solvents. It dissolves in nitric acid with a saffron yellow color and in sulphuric acid with a violet red color. It is principally used in the form of a salve.

Chloralose With Morphine.—By associating chloralose with morphine, in small doses, sound sleep may easily be obtained, says Dr. Colton, followed, on awaking, by a sense of comfort, quietude and strength. He first administers 5-10 centigrammes (¼-1½ grn.) of chloralose, and one-half to one hour afterward he injects ¼-½ cubic centimeter (4-8 min.) of a 1% solution of morphine (representing ¼-½ ctg. [1/16-1/8 grn.] of morphine).—*Am. M. S. J.*

Mucilage Pencil.—Sapple gives the following formula (*Neueste Erfind. u. Erfahr.*): Warm 28 parts of dextrin in 32 parts of water until solution is effected; in this solution put 54 parts of best glue and 4 parts of sifted zinc white; after standing eight hours, warm the mass in a water

bath until the glue is melted; after mixing thoroughly by stirring, add 160 parts of glucose, previously melted on a water bath, and stir. Pour the mass into cylindrical tubes, and allow it to harden.

To Harden Leather.—Rigout (*Chem. Zeit.*) suggests the following method for hardening the end of leather bands: First free from fat by dipping in a warm soda solution, and when dry put for fifteen minutes into a boiling hot 10 per cent. solution of borax; allow the whole to cool and finally dry. The leather so treated is horny and, if it is light, transparent. It is very hard and not brittle, so that it can be cut with a knife. So long as the leather so treated is yet damp it can be very easily pressed into any desired shape.

New Tests for Tannic and Gallic Acid.—Frederick Davis, a London chemist, proposes the following hitherto unknown and unpublished test for distinguishing tannic and gallic acids.

Tannic acid: To a solution of tannic acid add solution of potash and solution of chloride of barium, a pink precipitate results, gradually darkening.

Gallic acid: To a solution of gallic acid add solution of potash and solution of chloride of barium, a blue precipitate results.

The coloration with gallic acid is beautiful in intensity and quite distinctive; that with tannic, however, is a dirty pinkish tinge, at first almost slatey-green but quite different from the color given by gallic acid.

Antiseptic Powder.—The following formula has given Dr. A. Pick very

erages (wine, cider). They thus constitute eligible solvents of quinine salts, and even of most other alkaloids that are but little or not at all soluble in neutral liquids; and they will be of special advantage, it is maintained, in hypodermatic injections, owing to their very feeble action on the constituents of the blood. The proportions necessary to render 0.5 gramme ($7\frac{1}{2}$ grn.) of quinine sulphate soluble in 60 grammes (2 fl. oz.) of distilled water are: tartaric acid, 10 centigrammes ($1\frac{1}{2}$ grn.); citric acid, 30 centigrammes ($4\frac{1}{2}$ grn.).

Detection of Small Quantities of Glucose in Urine.—Dr. Focke calls attention to the fact that in using Fehling's solution for detection of glucose in the presence of large quantities of salts the greenish blue color of the voluminous precipitate caused by the salts sometimes covers the red color of the reduced oxide of copper leading to erroneous conclusions. It is just such urine that the physicians send most frequently for examination. Dr. Focke states that this difficulty can be overcome in a large measure by the following method of procedure, which while rather complicated for the physician, is easy for the pharmacist to carry out. Boil 10 grammes of the urine under examination with 5 grammes of copper sulphate solution, allow to cool thoroughly, filter, and to the filtrate add two grammes of 10 per cent. sodium carbonate solution, shake well and allow to stand until the precipitate formed is settled, and then filter. Now add a few drops of the urine thus treated to Fehling's solution previously diluted with an equal quantity of water and boil, when, after a few seconds, the characteristic precipitate varying from lemon yellow to brick red will make its appearance. Where very small quantities of sugar are present (anything under 0.05 per cent.), a very distinct precipitate can be obtained if to the whole of the urine some copper sulphate solution is added and an alkaline solution of Rochelle salts then added until the solution is clear and the whole then heated.

Odontodol Toothache Drops.—Cocaine, 1 part; essence of cherry laurel, 1 part; tincture arnica, 10 parts. This on wool is to be packed into a cavity if the trouble arises from caries; if inflammation of the pulp be the cause, the mouth is to be rinsed with a mixture of 30 drops of odontodol in an ounce and a-half of tepid decoction of linseed. In the event of this not being successful in relieving the pain, it is recommended that the jaw and all around the affected part be rubbed with pure odontodol. The *Union Pharmaceutique* is of opinion that this is the finest odontalgic yet brought into notice, and the *National Druggist*, which supplies the foregoing information, not to be behind its contemporary, says:—The most powerful and perfect odontalgic that we have ever tried, is made by rubbing together $\frac{1}{2}$ gr. of atropine, 3 grains cocaine and 100 drops camphophenique. It stops an aching tooth with lightning-like rapidity, providing the nerve can be reached. A single droplet placed on the hollow with a hypodermic syringe, or introduced on a pledget of cotton, acts instantaneously, and the relief is fre-

quently permanent. Sometimes a drop of a 5 per cent. solution of aconitine or of atropine does the same thing, but neither is so certain and swift as the mixture indicated. It seems scarcely necessary to warn against too frequent repetitions of any of the preparations, and especially against swallowing any of them.

Bromo Combinations.

To supply the demand for "Bromo" combinations nothing will be found any more satisfactory than the National Formulary's effervescent bromide of potash with caffeine; it is an excellent combination and is easily made.

The coloring of soda syrups by means of artificial coloring, is not desirable. If it is desired to color use fruit colors, such as German black cherry juice or black raspberry for red. It is recommended by some to color syrup lemon with tincture curcuma, but our experience has been against it. It raises with the foam and soils the face; besides it is entirely unnecessary. Vanilla is another syrup which it is best not to color.

British Pharmacists and the Metric System.

At a recent Council meeting of the Pharmaceutical Society of Great Britain, W. Martindale moved the following resolution:— "That after the first day of January, 1895, a practical knowledge of the metric system of weights and measures shall be required of all candidates for the Minor examination in the subjects of prescriptions and practical dispensing, and that the Board of Examiners be instructed to require from candidates a general knowledge of posology in terms of the metric as well as the British system of weights and measures as defined by the British Pharmacopoeia, 1885; and in practical dispensing 'to weigh, measure, and compound medicines' by the metric as well as the British system of weights and measures." After some discussion, the resolution was altered to the effect that the Board of Examiners should be requested to consider the advisability of acquiring a practical knowledge of the metric system of weights and measures for the Minor examination. In this form it was carried.

Marine Plant for Window Display.

The show windows of the pharmacy at 467 Florida avenue, Washington, D. C., have been the center of attraction in that locality ever since the proprietor, Joe D. Coblenz, commenced the cultivation of marine plants for display purposes. The students of the P. C. P. and N. Y. C. P. are familiar with the display of marine plants at the Seabury laboratories, East Orange, N. J. The plants are formed by dropping crystals of ferrous sulphate into a 15 per cent. solution of water glass or sodium silicate. Crystals of lead, copper, zinc and aluminum salts also combine with sodium silicate in solution to form tree-like growths, but the results are not equal to that obtained with iron sulphate.

Referring to his new window display, Mr. Coblenz thus expresses himself in a recent letter:

"I have in my show windows a very

handsome plant, which is both decorative and useful. It draws customers as well, something new to the Washingtonians. The plant is in a glass jar about half the size of a whiskey barrel. To form the plant I made a solution of water glass, containing about 15 per cent. of the silicate solution, and dropped into it several crystals of iron sulphate and sal-ammoniac. The iron formed a greenish brown colored plant, and the ammonium chloride a plant of a dark red color. The two grew together, and formed one of the handsomest marine plants imaginable. It did not stop growing until it had attained a height of three feet and looked simply magnificent.

"The Washington papers made excellent copy out of the display, and published a number of interesting articles relating to it."

Artificial Quinine.

We learn from the *Chemist and Druggist* that the well-known pharmacist M. E. Grimaux intends, conjointly with Drs. Bourru and Laborde, to publish a work on researches made by them on certain chemicals homologous to quinine. The experiments in question have special reference to *cupreine*, alkaloid-phenol obtained from cuprea bark, *quinethyline*, and *quinopropylamine*. The following are the principal conclusions arrived at:—

Salts of *cupreine* have not a specially-marked activity in therapeutics; salts of *quinethyline* can take an important place beside salts of quinine on account of their superior antiperiodic power and the slight poisonous element they contain; salts of *quinopropylamine* do not appear to have the same future as antiperiodic medicaments, because their action is very little superior to that of the compounds having *quinethyline* as a base, whereas they contain poison to a much higher degree. As in the case of *antithermine*, there is a need of experiments with *quinopropylamine*, which may render considerable service in infectious fevers.

The subject was discussed at a recent meeting of the Paris Academy of Medicine. In reply to remarks by Dr. Laborde, M. Laveran said that the clinical observations of the former did not appear to be absolutely demonstrative. In his opinion it would have been equally interesting to discover if the micro organisms were destroyed by the homologues of quinine. Dr. Laborde replied that the results in this respect are better with the homologues than with sulphate of quinine, and he promised to refer to the subject on a future occasion. M. Bouchardat declared that the results obtained by MM. Grimaux, Bourru, and Laborde are doubtless interesting, but do not appear to him to be practical, as "*quina cuprea*," from which "*cupreine*" is extracted, at present no longer exists.

Henna.

Henna, known to Europeans almost solely as a hair-dye, holds an important place in Arabian pharmacy, according to the reports of M. Ehrmann. With them it is used principally in the form of a powder of greenish-brown hue, showing an orange tinge when exposed to the light. It is formed by simply

drying and then powdering the leaves of the *Lawsonia alba*. As among the earliest Egyptians, it is used by the Arabians as a cosmetic. Its slightly tanning effect toughens the skin, lessens the perspiration, and protects the skin against sudden changes in temperature. Almost all the women and many of the men dye their hands and feet with the powder, after the following manner: The powder is moistened in a little water and the paste spread upon the extremities, which are bandaged with linen on going to bed. By morning the color, a bright yellow, had become sufficiently endyed to last without renewal for fifteen or twenty days.

The "koheul" of the Arab women is made with powdered henna mingled with lemon-juice, this preparation being considered superior to that made with antimony. The Arab proverb says, "that every woman who smears her eyelids with koheul, her hands and feet with henna, and perfumes her breath, is pleasing to God and to her husband."

In a more strictly therapeutic sense, the powder is used in the treatment of rhagades and ulcers; while a decoction of henna is prescribed in diarrhoea, hepatitis and calculous disease. It is a commonly used parasiticide for pediculi. Cataplasms of henna and anise are employed for the relief of migraine.

A Lemonade Analysis.

Professor C. T. P. Fennel has been distinguishing himself in the Cincinnati courts as a lemonade expert. It came about in this way: A certain William Bordosi is owner of the International Automatic Machine Company, which controls the sale of lemonade in penny-in-the-slot machines in Cincinnati. Bordosi was recently arrested on complaint of the Food and Dairy Commissioner on charge of selling adulterated lemonade.

Professor Fennel was called by the State and instructed to make an examination of the lemonade, with a view of determining whether the article was a pure or adulterated lemonade.

We will here quote from the *Cincinnati Star*, which gives the following extraordinary narrative of Prof. Fennel's mode of analyzing lemonade which is no doubt as amusing to the Professor as it will prove astonishing to our readers.

Prof. Fennel was instructed to make an examination of the lemonade before the jury, and taking out his various apparatus, began the task. He lit his lamps, filled and refilled his little tubes, made tests and counter tests, explaining each step carefully to the jury, who were all attention. First came the test for lemon, and after working over twenty minutes it was clearly proved that there was no lemon in the combination.

"Can you find any trace of lemon?" was asked.

"No, sir," answered Prof. Fennel, "there is no trace whatever of lemon. There has not been any lemon near this concoction."

Then came the test for citric acid, but no trace of it was found. Then came the regular analysis of the lemonade, when a

startling state of affairs was made plain. Ninety-three per cent. was water, 6.6 per cent. sugar and 70-100ths per cent. tartaric acid, the latter being used to give the lemon flavor. The defence made an unsuccessful effort to show the absence of the tartaric acid, and to substitute the citric acid, but the jury was convinced. Chemist Fennel then took the lemonade and brought out the various acids. He showed the awful effects of the tartaric acid, which is composed of a large percentage of nitrate of silver. By means of chemicals, Prof Fennel brought out the nitrate of silver in a startling manner.

After securing a quantity of the silver from the tartaric acid he washed a piece of glass tubing in the solution and placed before the jury a finished and complete mirror. It was a fitting end to the chemical analysis, and carried conviction.

"What effect would the tartaric acid have on the stomach?" was asked.

"It would simply burn the stomach, and if placed in the stomach in large quantities would result fatally."

Elixir of Phosphate of Iron, Quinine and Strychnine.*

BY CHARLES T. HELLER, PH.G.

St. Paul Minn.

In reading the pharmaceutical journals of the last few years, one is struck with the frequency in which the editors are asked: What is the matter with this or that formula? In March last the *AMERICAN DRUGGIST* asked its readers, who had experimented with this elixir, to give a general account of the process they employed. Several answered the request, but in the writer's opinion the working of some of the formulas was too complicated, the others failed to be satisfactory in not mixing clear with water, making such an unsightly mixture that it nauseates the patient.

The formula which I have used for the past three years has always given entire satisfaction; the elixir is easily made, miscible with water, and costs twenty-eight cents per pint—but a few cents more per pint than that made from the sulphates. If time were counted in cost, my formula would be the cheaper. Each fluid drachm contains two grains phosphate of iron, one-half grain quinine and one hundredth of a grain of strychnine.

The formula is as follows:

Phosphate of Iron, U. S. P.,	256 grs.
Quinine (alkaloid).....	64 "
Strychnine, ".....	1/4 "
Alcohol.....	2 fl. oz.
Water.....	2 "
Syrup.....	2 "
Aromatic Elixir, q. s. ad.....	16 "

Dissolve the phosphate of iron in the water, quinine and strychnine in the alcohol, mix the two solutions, shake, add the syrup and lastly the aromatic elixir. Set aside a short time, and filter if necessary.

There is one point in making the elixir I wish to call attention to; in adding the iron solution to the solution of the alkaloids, a thick curdy precipitate occurs; do not be alarmed at this, but continue as directed. Set the elixir aside and it will clear up in from a half hour to an hour.

I have made the elixir, when it has,

*Read before the Minnesota Pharmaceutical Association, June 12, 1904.

for some unknown reason to me, taken three or four hours to clear, but the usual time is from one half to one hour.

Flexible Varnishes.

[Th. Koller in *Neuere Erfind. u. Erfahr.*]

ALCOHOLIC VARNISH.

Sandarac.....	Parts.
Venetian turpentine.....	48
Mastic.....	1
Alcohol.....	24
	120

ELASTIC COPAL VARNISH.

Camphor.....	Parts.
Copal.....	1
Ether.....	4
	12

Allow to stand for a week and decant the solution.

VARNISH FOR BOTTLE CAPS.

Gutta-percha.....	Parts.
Shellac.....	1
Turpentine.....	10
Alcohol.....	1
	45

ELASTIC DAMMAR VARNISH.

Gum Dammar.....	Parts.
Acetone.....	4
Collodion.....	20
Shellac varnish.....	1 to 3

Powder the gum dammar, allow to stand for 14 days with the acetone, separate off the clear solution and mix with collodion and shellac varnish.

ELASTIC VARNISH FOR IRON.

Melt asphalt and add to it a sufficient quantity of petroleum.

ELASTIC RUBBER VARNISH.

Rosin.....	Parts.
Rubber, cut fine.....	2
Linseed oil.....	1
	3

Melt the rosin, heating until the mass begins to give out white vapors, then add the pure rubber gradually with constant stirring, heating until the mass is fairly uniform, then add the linseed oil gradually and heat until disagreeable vapors are given off. Remove from the fire and stir until cold.

CELLULOID VARNISH.

Gun Cotton (pyroxylon).....	Parts
Ether.....	1
Alcohol.....	3
Camphor.....	4
	0.25

Dry the gun cotton over sulphuric acid and pour over it the ether and alcohol, decant the clear solution after a few days and add the camphor, this can be diluted if necessary with wood alcohol and may be colored with any desired aniline tint. This varnish has the advantage over zapon that it contains no amyl alcohol, nor amyl acetate which produce headache and irritation of the respiratory organs.

FOR POLISHING WOOD.

[*Krohn Zeit. f. angew. chem.*]

Alcohol.....	Parts
Benzine.....	300
Benzoin.....	700
Sandarac.....	8
	16

VARNISH FOR TIN BOXES.

[*Bayer Ind. U. Gew. Rt.*]

Turpentine.....	Parts
Boiled linseed oil.....	8
Amber gum.....	4
Shellac.....	4
	1

Melt together and color with curcuma, or aniline colors.

Extracts From the Sixth Edition of Dieterich's Pharmaceutical Manual.*

Mineral Water Salts.

EMS, KESSELBRUNNEN.

For 10 liters.	Grammes.
Sodium chloride.....	8
Sodium bicarbonate.....	25
Potassium sulphate.....	0.5
Calcium sulphate, recently precipitated.....	3
Magnesium sulphate, dry.....	2.1

EMS, KRAHNCHEN.

For 10 liters.	Grammes.
Sodium chloride.....	9
Sodium bicarbonate.....	25
Potassium sulphate.....	0.4
Calcium sulphate, recently precipitated.....	2.8
Magnesium sulphate, dry.....	2.1

CARBONATED CHROMIUM WATER,

(According to Guntz).

	Grammes.
Potassium bicromate.....	0.02
Potassium nitrate.....	0.06
Sodium citrate.....	0.06
Sodium chloride.....	2.12

Mix, and put the mixture in a glass bottle, cork and label "Salt, for ½ liter carbonated chromium water."

The half of this quantity may be poured into a half-pint glass, the glass filled half full of water, stirred with a silver spoon until solution is effected and the glass then filled with carbonated water. Drink the water so prepared in the course of ten minutes with frequent intermissions.

PYROPHOSPHATE OF IRON WATER.

For 10 liters.	Grammes.
Sodio ferric pyrophosphate.....	45
Sodium pyrophosphate, dried.....	5
Sodium chloride.....	5

Triturate well together and put into a glass container and stopper well and label "salt for 10 liters of pyrophosphate of iron water."

MOOR BATHING SALT.

	Grammes.
Ferrous sulphate.....	900
Calcium sulphate, precipitated.....	20
Magnesium sulphate.....	20
Sodium sulphate.....	40
Ammonium sulphate.....	20

BATHING SEA SALT.

	Grammes.
Sodium chloride.....	800
Magnesium chloride.....	110
Calcium chloride.....	20
Potassium bromide.....	3
Potassium iodide.....	2
Magnesium sulphate.....	65

FERRATED BRANDY.

	Grammes.	Grains
Spiritus vini ferratus.....	93	1438
Cognac.....	30	
Gelatin solution, 1 to 100.....	1	15
Iron saccharate, 10% soluble.....	4	60
Distilled water.....		

Add the gelatin solution to the cognac, allow to stand for twenty four hours in a cool place and filter. Add iron previously dissolved in the water. Allow to stand for two days, and if necessary filter.

Veterinary Medicines.

The following doses are intended for grown horses, since foals generally require treatment only for those diseases which are peculiar to foals. As a general rule the quantities ordered may be adjusted to suit the age of the animal, according to the following proportions: For a colt 1 year old, 25 per cent. of the full dose; for a two-year old, 50 per cent., and for a three or four-year old, 75 per cent. of the full dose.

*Translated for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

FOR ANEMIA, PALLOR, OR POOR BLOOD.

	Grammes.
A.—Flowers of sulphur.....	30
Potassium bi-carbonate.....	25
Sodium chloride (common salt).....	500

One tablespoonful with each meal.

	Grammes.
B.—Flowers of sulphur.....	50
Antimony sulphide in No. 20 powder.....	25
Ferrous sulphate, in coarse powder.....	25
Calamus in No. 8 powder.....	50
Sodium sulphate, in small crystals.....	150
Sodium chloride.....	200

One tablespoonful with each meal.

	Grammes.
C.—Iron saccharate, 10 per cent.....	300
Manganese saccharate, 10 per cent.....	50
Cinnamon, in No. 8 powder.....	25
Cloves, in No. 8 powder.....	25
Calamus, in No. 8 powder.....	250
Sodium chloride (common salt).....	350
Sodium sulphate.....	1,000

For two horses: Give one tablespoonful to each horse at every meal, until the whole is used.

FOR SADDLE GALL.

Blisters or galls are brought about by badly fitting harness or saddles, which produce local sores very difficult to cure. The sores should be washed two or three times a day, with water and the salve given below, then applied.

For light cases

	Grammes.
A.—Zinc oxide.....	10
Water.....	10
Salicylic acid.....	5
Mutton tallow.....	25
Lard.....	50

	Grammes.
B.—Lead plaster.....	40
Mutton tallow.....	25
Lard.....	30
Salicylic acid.....	5

Spread either of these on a piece of linen and apply two or three times a day to the sores previously cleaned with water.

FOR BRONCHIAL CATARRH.

	Grammes.
A.—Ammonium chloride.....	30
Buckthorn seed, in No. 8 powder.....	25
Fennel, in No. 8 powder.....	25
Marshmallow, in No. 8 powder.....	100

Give in two doses in warm meal or in warm "soft" food.

	Grammes.
B.—Sodium chloride.....	500
Antimony.....	100
Buckthorn seed in No. 8 powder.....	50
Liquorice.....	50

One tablespoonful with each meal.

	Grammes.
C.—For chronic Bronchial Catarrh	
Sodium sulphate in small crystals.....	200
Sodium chloride.....	200
Sodium bicarbonate.....	100
Liquorice in No. 8. powder.....	100

One tablespoonful with each meal.

For Influenza.

APPLICATION FOR THE LARYNX.

	Grammes.
Mercurial ointment.....	20
Tallow.....	30
Hyoscyamus oil (10 per cent. infusion olive oil).....	50

Rub morning and evening.

INFLUENZA POWDER.

	Grammes.
Ammonium chloride.....	30
Potassium nitrate.....	30
Sodium sulphate, granular.....	100
Liquorice in No. 8 powder.....	65

One tablespoonful in warm, soft food three times a day.

INFLUENZA PILLS.

	Grammes.	Grains
A.—		
Powdered camphor.....	5	75
Potassium nitrate.....	30	300
Aloes.....	30	450
Flaxseed meal.....	25	375

Water sufficient to make two boluses. One pill every three hours.

B.—For the diarrhoea which often occurs.

	Grammes.	Grains.
Alum.....	20	300
Tannin.....	5	75
Liquorice, powdered.....	25	375
Molasses sufficient to make two pills.		

One pill every five hours.

PURGATIVE ELECTUARY.

	Grammes.	Grains.
Aloes.....	20	300
Dried sodium sulphate.....	100	1500
Flaxseed meal.....	50	750
Soft soap (green soap).....	20	300
Molasses a sufficient quantity to make a stiff electuary.		

Give in two doses with an interval of two hours.

LINIMENT.

	Parts.
Oil of turpentine.....	30
Spirit of camphor.....	170

Sprinkle the abdomen, rub with a whisk of straw, and wrap the abdomen in a warm wrap.

(To be Continued.)

Turpentine in Hæmorrhage.

Dr. Sasse states in *La Sem. Med.* that he has obtained excellent results from the use of oil of turpentine in the treatment of certain kinds of hæmorrhage, and thinks it should be more frequently employed for this purpose than it actually is. In the incoercible hæmorrhage, for instance, which sometimes supervenes after the extraction of a tooth in a "bleeder," there is said to be no better treatment than plugging the socket with cotton steeped in oil of turpentine. Dr. S. has seen one case in which this immediately stopped a very abundant hæmorrhage consequent upon the extraction of a tooth, after several other measures, including plugging with iodoform gauze, had failed to produce the desired effect.

In hæmorrhage from the mouth, in scorbutic patients, he has successfully had recourse to pencilling the gums every hour with pure rectified oil of turpentine; small doses of this remedy were also administered internally.

Lastly, in a case of vesical hæmorrhage which had proved refractory to all other hæmostatic measures, the bleeding was completely arrested by the use of a mixture containing ½ per cent. of oil of turpentine, a tablespoonful of which was given every hour.

Alumol in Skin Diseases.

DR. CANTRELL, (*Amer. Med. Surg. Jour.*) has obtained satisfactory results from alumol in acute vesicular eczema, erythema, intertrigo; chronic seborrhoeic and moist eczema; non-specific ulcers; trichophytosis corporis; chromophytosis; and contagious impetigo. He employed the drug in powders, 25% strength; ointments, 5 to 25% strength; and as a solution in water, 25% strength.

FOR BURNS.

UNNA.—Medical Record.

Anhydrous lanolin.....	10 parts
Benzocaine lard.....	20 "
Lime-water.....	30 "

The Valuation of Drugs by Keller's Method.*

(Concluded from Page 55.)

SABADILLA.

Sabadilla (80 powd.)	15.0 gm.	15.0 gm.
Ether	150.0 gm.	150.0 gm.
Ammonia	10.0 gr.	10.0 gr.
Water	30.0 grs.	30.0 grs.
Pour off	100.0 gm.	100.0 gm.

Extract with hydrochloric acid and eventually with ether.

Sabadilla seeds contain considerable fat, which, however, does not hinder the assay.

Pour the ether over the drug contained in a 300 cc. flask, macerate for about one hour, add the ammonia, and after another hour the water. After shaking the mixture vigorously set it aside for one or two hours, after which with due care, 100.0 gm. of the alkaloid solution may be poured off clear. The alkaloids after two or three treatments with ether are recovered as a white and partly crystalline mass, almost completely soluble to a colorless solution.

Keller found 4.25 to 4.35 per cent. of alkaloid, while the quantity reported by various authorities is given at 1 to 2 per cent.

The alkaloids represent a mixture which besides veratrine and veratroidine contains sabadilline, sabatrine, and some other alkaloids occurring only in very small quantity. (Merck's sabadine and sabadinine.) Little is known as to the proportion of the different alkaloids. Owing to the alkalinity and clear solution the alkaloids are easily titrated. Keller found for the purified alkaloid the equivalent 620 to 630, so that one cc. of deci-normal hydrochloric acid solution represents 0.0625 gm. of alkaloid.

ACONITE ROOT.

FORMULA A.

Aconite Root (80 powd.)	12.0 gm.	12.0 gm.
Ether	90.0 gm.	90.0 gm.
Chloroform	30.0 gm.	30.0 gm.
Ammonia	10.0 gm.	10.0 gm.
Water	30.0 gm.	30.0 gm.
Pour off	100.0 gm.	100.0 gm.

FORMULA B.

Aconite Root	25.0 gm.	25.0 gm.
Ether	100.0 gm.	100.0 gm.
Chloroform	25.0 gm.	25.0 gm.
Ammonia	10.0 gm.	10.0 gm.
Water	30.0 gm.	30.0 gm.
Pour off	100.0 gm.	100.0 gm.

Extract with hydrochloric acid, eventually with chloroform ether, or better, with pure ether. According to Hager the tubers contain 0.6 to 1.25 per cent. aconitine. Jurgens found but 0.2 per cent. The author found 5 samples to contain respectively 0.87 per cent., 1.14 per cent., 1.05 per cent., 1.23 per cent., and 0.97 per cent. of the alkaloid.

The alkaloid is recovered as a colorless residue, but after several treatments with ether it becomes a foamy, partly crystalline mass, in which form it may be recovered directly if ether is used for the solvent. It is easily and completely soluble in alcohol, the solution becoming turbid on the addition of water, and is easily titrated with tenth or twentieth normal acid solution. One cc.

of tenth normal hydrochloric acid represents 0.0647 alkaloid in the titration. Although the alkaloid obtained is a mixture, it is no doubt principally aconitine.

The pure crystalline aconitine may easily be separated from the amorphous bases. After the alkaloids have stood 24 to 48 hours they are washed with repeated small portions of cold ether by which the amorphous bases are dissolved, leaving the aconitine as a pure white crystalline powder. If the solution of the amorphous bases is evaporated a further amount of crystalline aconitine may be recovered. From a mass of 0.282 gm. crude alkaloid, 0.239 gm. crystalline aconitine, and 0.043 gm. of amorphous alkaloid were obtained.

Under the microscope the crystals appear as colorless rhombic plates, exhibiting the property of double refraction to polarized light and give a beautiful play of colors.

While the production of crystalline aconitine has been difficult, the opportunity is now given every pharmacist to make his own *aconitinum purum crystallisatum* by the above process.

If the crude alkaloid be dissolved in about 10 c.c. of alcohol, sufficient water added to cause a turbidity, and the latter just made to disappear by the further addition of the requisite quantity of alcohol, the aconitine may be recovered on spontaneous evaporation of the solution as colorless prismatic crystalline needles. The alkaloid appears to undergo some decomposition during the long standing, as the amount recoverable is considerably reduced.

If a little of the crude alkaloid be treated with some official phosphoric acid and the solution evaporated, a pale pink color with a violet tinge is developed. The pure crystalline aconitine develops no color. The amorphous alkaloids treated as above develop an intense brownish violet color. The reactions with sulphuric acid show the same variation and indicate that the color reactions of aconitine are not due to the latter but to its impurities.

ACONITE LEAVES.

Aconite Leaves (No. 80 powd.)	25.0 gm.	25.0 gm.
Ether	100.0 gm.	100.0 gm.
Chloroform	25.0 gm.	25.0 gm.
Ammonia	10.0 gm.	10.0 gm.
Water	30.0 gm.	30.0 gm.
Pour off	100.0 gm.	100.0 gm.

Extract with hydrochloric acid, and finally with chloroform ether. Decant about 105.0 gm. of the deep green solution, allow it to settle for a few minutes, then transfer 100.0 gm. of it into a separating funnel.

The alkaloid is recovered as light yellow coating. From commercial powdered aconite leaves of good appearance Keller obtained only 0.18 to 0.20 gm. of alkaloid. Swiss leaves contained 0.21 per cent.

The alkaloid from the leaves appear to be different from that obtained from the tubers requiring apparently less normal acid for neutralization. The equivalent for the alkaloid from the tubers is 645 to 647, while that of the leaves is but 440 to 450. The titration is best performed with N acid upon a concentrated solution of the alkaloids.

BELLADONNA ROOT.

Belladonna Root (No. 80 powd.)	12.0 gm.	12.0 gm.
Ether	90.0 gm.	90.0 gm.
Chloroform	30.0 gm.	30.0 gm.
Ammonia	10.0 gm.	10.0 gm.
Water	30.0 gm.	30.0 gm.
Pour off	100.0 gm.	100.0 gm.

Extract with hydrochloric acid and finally with chloroform ether.

The atropine is recovered in a very pure condition, as an almost colorless coating, which becomes partly crystalline on repeated treatment with ether. It is soluble in alcohol to a colorless solution and is easily titrated. 1 Cc. of N acid represents 0.0289 gm. of atropine. The results by weighing agree closely with those of the titrations. Keller found 0.66-0.67 per cent. of atropine in a belladonna root.

BELLADONNA LEAVES.

Belladonna Leaves (No. 80 powd.)	25.0 gm.	25.0 gm.
Ether	100.0 gm.	100.0 gm.
Chloroform	25.0 gm.	25.0 gm.
Ammonia	10.0 gm.	10.0 gm.
Water	30.0 gm.	30.0 gm.
Pour off	100.0 gm.	100.0 gm.

Extract with hydrochloric acid and finally with chloroform ether.

The atropine from the leaves presents the same properties as that from the root. Keller found 0.38-0.40 per cent. of atropine in the leaves.

ERGOT.

To estimate the alkaloid take 25.0 gm. of dry ergot of about No. 60 fineness, pack lightly into an extraction tube and exhaust with petroleum ether until a few drops of the latter leave no further residue after evaporation on a watch crystal. Allow the petroleum ether to run off and dry the powdered drug at a gentle heat. Transfer it to a tared cylinder of 250 c.c. capacity, add 100.0 gm. of ether and after ten minutes add some magnesia milk. (10gm. Mg. O in 20.0 cc. water). Thoroughly shake the mixture whereby the ergot will collect in lumps and the solution separate clear.

Repeat the shaking frequently during a half hour, after which pour off 80.0 gm. of the ether solution or a less quantity according to the amount obtainable and make the necessary calculation as to quantity, 4.0 gm., representing 1.0 gm. of drug taken.

If the solution is not entirely clear let it stand for some time. Pour off the solution from any sediment and extract the ether solution with dilute hydrochloric acid (0.5 per cent.), using successively 25, 15 and 10 c.c. for the purpose. It is well to wash out with another 10 c.c. of the acid and test the latter solution with Mayer's solution for traces of alkaloid. If a turbidity results the washing with acid must be repeated.

The aqueous acid solution is usually slightly turbid. Any pronounced turbidity may be removed by filtration through a wet filter, or by adding a little pulverized talc to the solution and filtering again, and washing the filter with a little water. The acid solution is then shaken with an equal volume of ether after adding an excess of ammonia.

Repeat the extraction with two smaller quantities of ether. Combine the ether extracts, filter the same to remove drops of water and distil the solution from a tared flask on a water bath. Treat the residuums twice with a little ether, boil-

* Translated for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD from the *Pharmaceutische Zeitung*.

ing off the ether each time and then dry the flask, etc., to constant weight.

ETHER THE BEST SOLVENT.

For dissolving the alkaloid from ergot ether is preferable to other solvents, giving the purest alkaloid and separating more readily from the solution. Chloroform makes too strong an emulsion to be of any avail, although it is the best solvent.

Acetic ether is also unsuited. A mixture of chloroform and ether shows no advantage over ether as a solvent. By the above method the alkaloid is recovered as white or slightly yellowish colored crystals.

Petroleum ether does not dissolve any appreciable amount of alkaloid in the preliminary treatment. According to Keller there exists but one alkaloid in ergot, and the author considers Tanret's ergotinine and Kobert's cornutine as one and the same substance.

CHARACTER OF THE ALKALOID.

The picrosclerotine of Dragendorff and Blumberg are, no doubt, identical with the alkaloid obtained by the above method. The alkaloid possesses the following properties: When it has assumed the crystalline form it is difficultly soluble in ether, but readily soluble in chloroform and alcohol. It is insoluble in water, and is therefore precipitated on adding water to the alcoholic solution. It is insoluble in petroleum ether. The latter will precipitate the alkaloid in flakes from its solution in ether. The dilute alcohol solution shows a strong bluish violet fluorescence which is more conspicuous after acidulation. The fluorescence is best observed by looking down into a test tube filled with the solution and having the upper third surrounded by the palm of the hand. Keller could not observe any green or red coloration on exposure of the solution to the atmosphere, nor did the fluorescence change in intensity.

The alcoholic solution rendered slightly turbid by the addition of water has a slightly bitter taste. The alkaloid forms neutral salts which may be easily prepared by dissolving the alkaloid in chloroform, diluting with ether, and then adding an ether solution of the acid. The salt formed being insoluble in the ether is precipitated and may be collected on a filter and washed free from acid by means of ether. Strong daylight should be avoided during the operation. Thus the hydrochloride, tartrate and citrate were prepared. The neutral salts are readily soluble in water, difficultly soluble in dilute hydrochloric acid, so much so that a not too dilute solution of the hydrochloride is almost immediately precipitated on the addition of hydrochloric acid. The acetate and citrate acted similarly.

SOLUBLE IN CHLOROFORM.

From the neutral or slightly acid solution chloroform extracts the alkaloid, especially at a temperature of 50° C. Ether extracts but little alkaloid from the acid solution. The aqueous solution of the hydrochloride (1:1000) is precipitable by the hydroxides of ammonium, potassium,

sodium and barium; the precipitate dissolving readily in an excess of the last three reagents, but not in ammonia. The neutral solution of the above concentration is precipitated by all the known alkaloidal reagents.

The assertion of Kobert that cornutine is precipitated by mercuric chloride from solution made alkaline by barium hydroxide, could not be verified as the latter decomposes and precipitates the mercuric chloride. The alkaloid solution 1:5000 is immediately, or after a short time, precipitated by picric acid, iodo-potassium iodide, bromine water, tannic acid and potassium ferricyanide. Mayer's Reagent still gives a precipitate in dilutions of 1:10000, and in dilutions of 1:20000 a strong opalescence is perceptible.

COLOR REACTIONS OF THE ALKALOID.

Concentrated sulphuric acid poured over a few milligrams of the alkaloid contained in a watch crystal becomes at first slightly yellowish colored. The purer the alkaloid the brighter the color. After a few hours the color of this solution becomes gradually violet blue, the latter being quite permanent. This reaction has been known for a long time, having been applied by Tanret for ergotinine, and by Blumberg for picrosclerotine. Cornutine also gives the reaction, which the author regards as proof of the identity of the three substances. It is of interest to note that the crude crystalline alkaloid as obtained by the assay process when treated repeatedly with cold ether, leaves a difficultly soluble residue which, according to Kobert's views, would have to consist of cornutine, but nevertheless gives the color reaction, exceptionally clear and distinct.

The solution of the alkaloid in concentrated sulphuric acid does not give any definite color reactions with potassium bichromate, potassium permanganate, potassium nitrate, or potassium ferricyanide. With ferric chloride, however, it gives a sensitive and characteristic reaction. Dissolve a few milligrams of the alkaloid in concentrated sulphuric acid, after which add a small drop of ferric chloride solution. On stirring the mass an intense orange red color is developed which soon passes into a deeper red, while the edge zone assumes a bluish to bluish green color. According to the relative proportions of alkaloid and reagent the further progress of change in colors is variable, but the orange red and the bluish to bluish green outer zone are always developed and are to a high degree characteristic of the alkaloid.

THE YIELD FROM COMMERCIAL SAMPLES.

"Cornutinium hydrochloricum Koberti" dark brown hygroscopic leaflets, soluble in water, and "Ergotinum amorphum" a reddish white powder completely soluble in chloroform, were examined by the author with the result that it appears that these two alkaloids are identical with the alkaloid obtained by the Keller process from ergot. Similarity of physiological action gave further proof of the conclusion. Six different commercial samples of ergot of rye yielded respectively 0.095 per cent., 0.130, 0.157, 0.205, 0.245,

and 0.225 per cent. of alkaloid. The Russian sample was found to be the best, while the Swiss sample in which particular care had been taken in its collection, and hence supposedly the best, was found to yield the lowest percentage of alkaloid. The crude alkaloid in each case gave the same chemical reactions with exception of a Spanish sample which on treatment with conc. sulphuric acid gave a transient green color, but in other respects acted like the others. A sample of ergot which had been kept in a pulverized condition was still found to yield 0.165 per cent. of alkaloid. Keller emphasizes the statement of Koster (1885), that old ergot may be distinguished from the fresh by the color of the ether extract, the former yielding a dark brown, the latter a bright yellowish solution. Keller's investigation of ergot may be summarized as follows:

1. Ergot contains as the active principle only one alkaloid. Picrosclerotine, ergotinine, and cornutine are identical.
2. The alkaloid of ergot is a much more stable compound than has been supposed. In a properly packed pulverized ergot it will keep undecomposed for at least a year.
3. The fresh ergot contains the alkaloid in variable quantity, making its quantitative estimation desirable.

The New Pharmacopœia.*

By LEO ELIEL,
South Bend, Ind.

The revision for 1890 has been in our hands long enough to enable us to speak with some knowledge of the various changes presented therein. And, if in the remarks here offered, there should seem a preponderance of unfavorable criticism, you must bear in mind that the writer desires to bring these points out for discussion, so they may have some bearing on the next revision.

The work in its entirety is a most excellent one, and certainly we could expect nothing else when the high standing of the committee having the work in charge is taken into consideration.

OF WEIGHTS AND MEASURES.

This Pharmacopœia presents two important and welcome changes. The first being a return to the convenient and time-honored custom of weighing of solids, and measuring of liquids, the other, the adoption of the metric, or properly speaking, the decimal system, to the exclusion of all other systems. Since the appearance of the edition of 1880, there has been much said regarding the incorporation of an official dose list, the preponderance of opinion seeming largely in favor. Yet the committee on revision has not seen fit to incorporate such a list for the guidance of the pharmacist. Foreign Pharmacopœias have such lists, giving maximum and total dosage for 24 hours. In view of the fact that our dispensaries do not always agree as to dosage, a list giving minimum and maximum doses would have been a welcome addition. We really need a standard and official

*Read at the annual meeting of the Indiana Pharmaceutical Association, June 13.

dose list, and it would seem that the Pharmacopœia which is our standard for strength and purity, should also be our standard for dosage.

Another valuable addition would have been processes for the manufacture of the official chemicals. Very few of these, it is true, could be advantageously or economically prepared by the pharmacist, yet he should have opportunity to do so from official processes if he so desired. It would also establish a standard for their manufacture. The Pharmacopœia is chiefly a guide to the pharmacist in preparing and testing the various chemical and galenical preparations in use, and these processes would have been a welcome addition on that account, if, for no other reasons.

DISMISSALS AND ADDITIONS.

I will not take up your time by enumerating the dismissals and additions separately. The total number of dismissals are 91 and the additions are 88. Among the first dismissals, we note abstracts. We really do not miss them, for they never entered into use, and were a needless addenda to the 1880 edition. The first change noted, is in the preparation of the medicated waters. This is a welcome one, but still far from perfect, and can be vastly improved upon. In place of the old elixir orange we now have elixir aromatic. To this elixir phosphorous has been added, presumably to keep it company. Both of these are identical with the National Formulary preparations, and why these two should have been selected as worthy of official mention, and all of the other popular, much called for, and frequently prescribed elixirs ignored, is beyond comprehension. In cerates, the only important change is in the process of making cantharidal cerate. This yields a more active preparation and also takes the place of cerate extract cantharides which is dismissed. Among the chemicals admitted we find salol. This product as well as adep̄s lan̄e hydrosus are made under patented processes, and protected from infringement in the U. S. Their admission into the Pharmacopœia is a direct violation of Article 6 in the general principles to be followed in the revision, which states that no substance which cannot be made otherwise than under a patent process, or which is protected by proprietary rights, shall be introduced into the Pharmacopœia.*

CHANGES IN FORMULAS.

Decoctions and infusions, are now directed in the absence of specific order to be made with 5 per cent. of the drug. The list of fluid extracts has been increased from 79 to 88; glycerites from 2 to 6. In mercury with chalk, the sugar of milk is displaced by clarified honey. Among other additions, are effervescent lithium citrate and effervescent potassium citrate. Denarcotised, is now the deodorized opium, pancreatin is admitted, as well as pepsin, saccharated pepsin is now required to be capable of digesting 300 times its weight of coagulated egg albumen. Petrolatum

is sub-divided into petrolatum liquidum, petrolatum molle, and petrolatum spissum. The change in process of making syrup iodide of iron is a good one, yielding a more permanent product. The adoption of the National Formulary process for syrup hydriodic acid is also a good one, and will prove acceptable. Syrup ipecacuanha according to 1890 formula is a fairly permanent preparation, and a great improvement over the 1880 formula. Syrup lactucarium is again made from the concrete substance, and should it enter into general use, will prove a source of great annoyance to pharmacists generally. Syrup wild cherry is now made by mixing the glycerin and water, macerating and percolating the bark with the mixture. The value of this change is doubtful, glycerin acting as a solvent of the bitter principle of the drug. The product is also much darker. Syrup sarsaparilla compound, and syrup squills compound are now directed to be made from fluid extracts. These changes as well as that directing tincture nux vomica to be made from solid extract, can hardly be looked upon as progressive, but are rather retrogressive in their nature.

The scant information regarding processes of manufacturing chemical compounds, and the use of finished galenicals in the preparation of official products, give some apparent color to the slur which we so frequently hear in connection with the edition of 1880 that it was gotten up for the benefit of the manufacturers and not for the pharmacists.*

In this era of ready-made preparations we cannot too jealously guard and protect the few remaining features of what at one time was the exclusive privilege of the pharmacists, i.e., the production of his own galenicals.

CHANGES IN TINCTURES.

In tincture aconite, tartaric acid is now omitted and alcoholic strength is reduced to about 65 per cent. In tincture aloes, and aloes and myrrh, extract of liquorice is replaced by liquorice root. Tincture calendula is now made with alcohol in place of dilute alcohol. To tincture cinnamon 5 per cent. glycerin is added. Tincture cubeba is double its former strength. In making tincture iodine we are directed to triturate the iodine in a mortar. Very few will follow this process as it is wasting, disagreeable and does not expedite solution. Tincture musk has been reduced from 10 per cent. to 5 per cent. It should have been reduced to 2 per cent. as it is impossible to exhaust with that amount of menstrum. Acetic acid is added to tincture sanguinaria to the amount of 2 per cent. The change in ointment of rose water is a very good one. The process is shortened, and the result much more liable to prove satisfactory. Chrysarobin ointment reduced to 5 per cent., and diachylon ointment reduced to 50 per cent. Ointment of nut gall increased to 20 per cent. The change in mercurial ointment is a good one, and so easy now

that every pharmacist should prepare his own. Ointment red oxide mercury is now made with 5 per cent. castor oil.

Tar ointment is now indicated to be made with wax and lard instead of suet. Ointment iodide of lead with addition of thiosulphite of soda and water. Ointment veratrine, alcohol displaced by olive oil as a solvent.

Bitter wine of iron, is now made with soluble citrate iron and quinine instead of the solution of citrate iron and quinine.

There are number of other changes, but will not take up any more time enumerating them. The lists of reagents, tests, tables, etc., have been very much increased and form a very important and exceedingly reliable addenda to this work.

A New Committee Advocated.*

Every now and then we see articles in the newspapers and literary magazines setting forth the surpassing importance of this or that occupation. One man tells the reading public that the solar system would be upset were there no science of bacteriology. Another deacons on the value of sanitary investigations. The lawyer, the naval officer, the military man, the educator, are constantly speaking and writing of their respective professions in relation to general life. Now, whoever writes in the secular journals about the benefits conferred by pharmacy upon the community? We have among us a number of eminent men who write well and who are thoroughly competent to enlighten a public which sadly needs light. But has anyone ever seen an article by Professor Remington in the *North American Review* on this subject? Has Dr. Rice ever brought his great acquirements to bear in the service of his profession by informing the world, through the columns of the *Century* or of *Harper's*, how essential is a class of educated pharmacists to the welfare of the State? Has any one of our distinguished representatives ever essayed the thankful rôle of pharmaceutical panegyrist? What wonder, then, that reading and thinking people yet remain ignorant of the pharmacist's worth, and grudge him the hire of a skilled mechanic?

It is, of course, our own conviction that a class of educated, intelligent pharmacists is an essential part of every community. But it is useless to look for this conviction among the great masses of people who know nothing of the apothecary's function. For this reason we hold that the American Pharmaceutical Association should establish a Literary or Publicity Committee composed of its best and most influential writers. Their mission shall be to contribute to the leading magazines and periodicals popular articles setting forth the value of the educated pharmacist and his important place in the modern State. Their propaganda shall be directed to the information of the general public, and the elevation of the pharmacist in its esteem. This can only be

*[An explanation of the reasons which led to the inclusion of this substance in the 1890 Pharmacopœia, will be found on page 340 of our issue of June 28. Ed.]

[Pharmacopœias are not generally consulted for information regarding processes of manufacture of definite chemicals.—Ed.]

* From an Editorial in the *Bulletin of Pharmacy* for July.

done in the secular press—not by wailing in pharmaceutical journals, which the public never reads, nor by gushing over pharmacy as a noble calling in convention speeches which the public never hears.

We do not counsel pharmacists to rush headlong into print. We need not blow our trumpets and bang our drums. But in every community, some one pharmacist, capable of writing or talking well, can accomplish a world of good by an occasional article in the local newspaper, or an address before some club or fraternity, setting forth the character and value of the pharmacist's work. If we are not appreciated by the general public, the fault is ours; we have taken no pains to explain our work and exhibit our usefulness. The public must be educated. It must be taught to value us properly. Once made to understand how indispensable is the trained and educated pharmacist, it will not withhold its respect. But meantime let us not close our eyes to the magnitude of the impending task, and let us resolutely demolish the air-castles of a mistaken confidence where-soever they may be encountered.

The Pharmacognosy of Kola.*

BY F. A. FLUCKIGER.

The seeds of *Cola acuminata*, generally, but very improperly, termed kola nuts, enjoy a high class reputation in tropical Africa, which, apparently, dates back some long time. An Arabian doctor, El-Ghafeky, or Gáfiki, seems to have discovered them in the first half of the 12th century. So, at least, we may infer from a work of his, mentioned in the "Djami el Mufridât," of Ibn Baillâr of Malaga. In this work, which recalls that of Pliny in its characters, the author unites a dozen drugs under the name of "Djouz," which means "nuts" (Edit. Leclerc A. 383, No. 533). One of these Djouz-ez-zendj, is, according to Ghafeky enclosed in a fruit with a rough bark, about the size of an apple, but somewhat longer. The shape of the nut is comparable to that of the cardamom, of a reddish color, aromatic, and recalling galangal root. It is possible that the kola nut is referred to here. Ghafeky says that it comes from the desert of Berber, which possibly merely signifies that it is imported into Spain by the north of Africa. The remainder of the description informs us that the nut is used in the form of a powder for colic, stomach-ache, and possesses warming properties. The same element of doubt exists in the case of the little cardamom. According to Ghafeky, however, the description is of a larger seed than this, although he uses the term "Hil" for them, which is suggestive of *Korarimakardamom*, which is not, of course, so small. So that the evidence of the Arabian physician's knowledge of kola nuts is not by any means certain. The first absolutely definite mention of the drug occurred in the 16th century. In the rare and curious work of Odoard

Lopez, "Relatione del Reame di Congo," edited by Filippo Pigafetta (Rome, 1591), we find the following lines: "Vi sono altri arbori che producono frutti nominati Cola; i quali sono grandio come una pigna, e hanno deuto altri frutti à guisa di castagne, in cui sono quattro polpe separate di rosso colore, e incarnato; li tengono in bocca, e masticano per is pignese la sete e far saporita l'acqua." This description of kola leaves absolutely no doubt, and brings us to the date 1578 or 1587, when Portugal was making very strong efforts to colonize tropical Africa. Shortly after 1566, Guinea was visited by André Alvarez of Almada, who wrote in 1594 in his "Tratado breve dos rios de Guine" (edit. 1841) that on the borders of Gambia and on the banks of the rivers of Guinea, kola nuts were an important commercial article. The tree which produced them resembled the chestnut, except that the fruit was not spiny. Alvarez speaks also of the uses to which the nut was put, which recalls the chewing of the betel nut. Towards the end of the 16th century the Portuguese did much business with Senegambia and Sierra Leone. They carried thither kola nuts, which were then taken to the interior of the continent. The extraordinary value attached to them is testified by Coelho. The black population would scarcely undertake any enterprise without the aid of kola, and it was supposed to protect from the pangs of thirst. The annals of the Jesuits (1604-1605) also mention the importation of kola nuts into Sierra Leone by the Portuguese, where, according to Almada, they were one of the most valuable articles of exchange. Ficalho, from whom these details are borrowed, quotes two lines which show the value of the nut in the country bordering on Angola: "Qui goûté au kola, reste á Angola."

EARLY HISTORY.

At the end of the sixteenth century, kola nuts arrived in London. Apothecary James Garet, an amateur collector of foreign curios, who translated into English Acosta's "Traité des drogues des Indes" (Burgos, 1578), brought the nuts under the notice of Clusius, when this celebrated botanist paid a visit to London (either in 1591 or 1571), who at the same time received samples of them from Tobias Roels, a Dutch doctor. Abundance of information was forthcoming in the early part of the 17th century. Palisot de Beauvais, had seen the nut on his voyages (Benin and the Niger), and presented an illustration of it in his celebrated work published in 1804, under the name of *Sterculia acuminata*. In modern times no attention was paid to these nuts until very recently, not even when Attfield had announced that they contained 2.13 per cent. of caffeine. In 1882 Heckel and Schlagdenhauffen confirmed this statement, and said that in addition to 2.35 per cent. of caffeine, they had discovered .02 per cent. of theobromine. It is to these two French savants that the honor of having studied in detail the chemical composition and medicinal properties of kola, belongs. In 1884, they published a mono-

graph, "African Kolas." If we embrace the different varieties of kolas, under the name *Cola acuminata*, its area of occurrence stretches over the enormous region included by 10° north and 5° south. Karsten, who has done such good service to botanical studies of the regions of the north-east of South America from 1844 to 1856, says he has met with the kola tree upon the borders of Venezuela. When the sun and the climate are favorable there is not much difficulty in cultivating the tree. Fruit is obtained by the end of either the third or fourth year. It reaches its maximum, however, about the tenth year, and a single tree then yields about 100 kilos of nuts. The same tree gives both white and red grains. The latter variety yield the glucoside kolanine, discovered by Hilger. Heckel, in his monograph, borrows largely from the statements of travelers, but many of the statements are, doubtless, exaggerated, and require controlling by scientific inquiry. Many varieties of the *Sterculiaceae* are called kola, as their generic names, such as *Kola heterophylla*, *Kola Cordifolia*, etc., show. These species are easily distinguished by their external form and histological characters, and by the absence of caffeine and kolanine. *Kola ballayi*, however, does contain 1 per cent. of caffeine. *Garcinia kola* is distinguished by the yellow color of the grains, and also by their bitterness. They are rich in resin, but contain no caffeine. It appears then that the occurrence of caffeine is a characteristic of the genuine nuts, and can be used as a means to detect fraud. Further researches, however, should be directed on the part played by the glucoside kolanine.

The Cultivation of Ginseng.

Considerable inquiry and report relating to the cultivation of this drug has recently been printed in agricultural journals. As various branches of the drug trade are expected to act as distributors of this commodity, the following information, which appears in the *American Journal of Pharmacy*, may be of interest.

A correspondent of the *American Cultivator* in New York writes as follows:

I have recently taken up the roots from three beds 3 x 16 feet each, which had been in cultivation, one five years, the others four each. The combined product of the three beds was 1,074 roots, which weighed 73½ pounds. From these I assorted out 833 roots, weighing 20¾ pounds, for transplanting again, leaving 52½ pounds of clean washed roots to be dried for market. These will make about 17 pounds when dry, worth \$3 to \$3.50 per pound. The seed produced from the plants during the time was worth at least \$40. It will be observed that the stock has been decreased only 241 roots. The beds were set with small, wild roots four or five years ago. The roots originally set were much smaller than those taken off for resetting. Two hundred and

* From "Forschungsberichte über Lebensmittel und ihre Beziehungen zur Hygiene," Munich (1894-95), through *British and Colonial Druggist*, July 18, 1894.

thirty-three seedlings, three seasons' growth, weighed $3\frac{1}{4}$ pounds. I have at this time in my garden 32 beds, 3x16, stocked with roots and seeds, only one bed more than three years old. Have over 30,000 seeds in forest culture. It looks to me as though this was a paying business and worthy the attention of gardeners.

American Gardening furnishes the following information, which can easily be verified by anyone who may feel doubt about it:

WHAT GROWERS IN THE BUSINESS HAVE TO SAY ABOUT IT.

In recent years there has been much inquiry about ginseng culture and its possibilities. People in our hilly sections have for years been engaged in digging the wild ginseng (*Aralia quinquefolia*). They had no trouble to find a market for the dried root at paying prices, the demand of the Chinese people for the product, on account of its great but mysterious medicinal properties, being usually larger than the supply. The diggers of the plant, well aware of the great commercial value of the root, have often attempted to transplant the root to their gardens, or to start plants from seed, but have uniformly made a failure of it, either because the plant defies the cultivator's skill, or because no such skill has been brought to the task. We believe that the latter is the case, and that the plant can be made to thrive under cultivation, if the same conditions are provided under which the plant thrives in its wild state.

Evidently the seed is slow to germinate and the root of slow growth. We have feared that this growth was indeed too slow to make the culture of the plant profitable. Recently, however, we have the reports of a few persons who have made a success of ginseng growing. As most of these persons hesitate to give information on the subject, for fear of drawing a considerable number of people into the business, thus flooding the market and spoiling prices, it seems that after all there may be good money in the culture of the root.

The following are communications received from ginseng growers in reply to our direct inquiries:

GINSENG GROWING IN KENTUCKY.

Ginseng seed will germinate in six months if proper conditions exist. Two years' growth makes a good salable root. Of course, two or three years' additional growth would make them much larger. I have roots grown direct from the "seed" that are from one-half to one inch in diameter, and from five to twelve inches in length, tapering to a small fibre at second year's growth. On an average five to seven roots will weigh one ounce when dried. Ginseng thrives best in moist, fertile soil, in woods where it is lightly shaded. It must have light and air. My nursery is located on a rich, north hillside. The soil is of limestone nature. Timber was walnut, beech, ash, poplar, oak, hickory, dogwood, etc. A rich north-west and north-east slope is good. So is flat land, if not swampy, and in fact any

rich, moist, fertile soil. I have a trial bed in open land. Will give it artificial shade. I used virgin soil, humus and leaf mould from the forest to bed with.

The best roots are grown direct from the seed. The quickest and best way to get a start is to plant roots that bear or produce seed. If seeds are planted, they will not produce any seed until the second year, and not many then; but if roots are planted they produce seed first year, and plenty of them if old enough. I have a lot of old roots, taken from the forest and transplanted to my nursery. These I keep to produce seed. Some of them produce from 75 to 100 berries, or from 150 to 200 seeds; some as low as three berries or six seeds. A berry contains one, two, three and sometimes four seeds.

In the Fall of 1891 I planted, or transplanted, a bed of roots one year old, cultivated them two years, then I dug them. They weighed all the way from one to two pounds, dry, per 100 roots; average size, one inch in diameter and ten inches long, tapering to a fine fibre. Last year I transplanted one root (eleven years old) taken from the forest. It was nine inches in circumference, fifteen inches long, and weighed nine and three-quarter ounces. This root, if dried, would weigh about three ounces, and would bring 75 cents at \$4 per pound. J. W. SERAS.

Somerset, Ky.

FROM A NEW YORK GINSENG FARM.

I am aware that very many efforts to cultivate ginseng have proved failures. This is no evidence that the plant cannot be grown.

Ginseng seed requires eighteen months to germinate. It should not be allowed to get dry, but must be sown as soon as ripe, or may be packed in moist loam, and kept in condition to promote germination one year, and then sow.

Anything in the shape of a ginseng root is salable, but the larger the root the greater its value.

The plant can be grown in any light, rich soil. We find it wild in all kinds of dry soil, but it needs shade, either natural or artificial. We can successfully cultivate it in garden, orchard or forest. My own operations thus far with transplanted roots have been in open garden with artificial shade. From my own experience in this business, I am satisfied that it will pay to cultivate ginseng, for the commercial value of the root, at \$2 per pound. The greatest value of the seed at present is in putting it in the ground to get roots from it.

If one works only for self-interest, it is too much to work up a demand for ginseng seed to make any money out of it.

I have the addresses of four parties in this country who are cultivating the root successfully, but fear to say anything about it lest other people engage in it. I have tried to get in correspondence with them for interchange of experience, but they are "mum."

I know of but one cultivator other than myself who has tried to bring this matter before the public. He has recently written me that the only way he expects to make any money out of the business is by growing the root for the general market (in China).

My grounds are open to all who wish to investigate. I am in the business to stay, so long as I have health to carry it on, and am willing to aid in its development. GEORGE STANTON.

Summit Station, N. Y.

Natural Sodium Salts.

BY R. L. PACKARD.

U. S. Geological Survey.

The geographical occurrence of natural soda in the United States is principally confined to the arid regions of the Great Basin, especially to the soda lakes at Ragtown, Nevada; Mono Lake, Mono County; Owens Lake, Inyo County, California, and Albert Lake, Oregon, and to the many dry deposits and incrustations in the same region. The lakes are, for the most part, the residues left by the evaporation of larger bodies of water. The concentration by evaporation of the waters of the former lakes has increased the proportion of their mineral salts, and sometimes this concentration reaches the crystallizing point, when the sodium carbonate appears as a white incrustation on the surface and shores of the lake.

NEVADA SODA LAKES.

The Ragtown, Nevada, soda lakes are two adjoining, but not visibly communicating, small bodies of water, the larger being about 268 acres in extent, and the smaller only about one-fifth of a mile in diameter. They have the peculiarity that they are enclosed by rims which are higher than the surface of the desert, while the lakes themselves are below the level of the plain. While, therefore, these lakes or ponds are in the hydrographic basin of the great Quaternary Lake, they are not evaporation residues of a portion of that body of water, but their high saline contents are due to the gradual concentration of their own water supply. The density of the water of these lakes is very high. A specimen analyzed by Dr. Chatard had a specific gravity of 1.0996, and contained 129.011 grammes of mineral salts per liter. The salts of soda which crystallize from this water form a crust sufficiently strong at some season to support a man's weight.

"SUMMER SODA" CRYSTALS.

The large proportion of sodium chloride and sulphate which the lake water contains has been eliminated by this natural process of crystallization, a process which has been imitated in the manufacture of "summer soda" at the Ragtown soda works. The other soda lakes are residual bodies of water left by former large lakes. Mono and Owens Lakes, California, are of this character. Their hydrographic basins have no outlet, but streams and springs feed the lake, and the only escape for the water is by evaporation. There are springs in the bottom of the lake and near its shores. They are especially abundant near the base of the mountains—the seat of former orographic movements—and a belt of hot springs extends along the range for hundreds of miles. The density of the water of Mono Lake is far less than that of the Ragtown ponds. At the time in 1882 when the specimen analyzed by Dr.

Chatard was collected, it was 1.045 and the evaporation residue amounted to 53.473 grammes per liter.

PRECIPITATES OF LIME.

Above the surface of the lake and on its shores are pinnacles and domes of calcareous tufa, which often assume fantastic shapes. These domes are formed under water, often at the mouths of springs, carrying lime in solution, which is precipitated at their mouths. The proportion of lime in the spring water is small, but long-continued action is sufficient to build up these domes. The lake formerly covered the tufa now projecting above the water. Sometimes the deposit is formed around springs in the open air, when simple evaporation would account for it, as in the case of travertine and siliceous sinter. But when the precipitation occurs under water, it would seem that the alkaline carbonates of the lake water must be the precipitating cause. The comparatively small percentage of lime in the waters of the lake shows that this element must be deposited as fast as it is delivered by the inflowing streams and springs. It does not, therefore, coat the rocks now washed by the waves, or form a sheet of tufa on the bottom of the lake.

Professor Russell states that one of the Mono craters is composed of hornblende andesite; the others are of rhyolite, and there is much basalt, both older and more recent than the lake.

The rhyolite, like volcanic rocks in general, contains both soda and potash; yet very little potash, compared with the soda, is found in the waters of the soda lakes. Andesites contain on the average 4.26 per cent. soda, 2.68 per cent. potash, 5.03 per cent. lime; trachytes, 5.25 per cent. soda, 6.37 per cent. potash, and 1.61 per cent. lime; liparites, 4.49 per cent. soda, 3.49 per cent. potash, 1.21 per cent. lime; basalts, 3.12 per cent. soda, 1.23 per cent. potash, and 10 per cent. lime, while granites average 2.93 per cent. soda, 3.95 per cent. potash, and 2.54 per cent. lime. The relatively small proportion of potash in the waters analyzed is noteworthy, as they are so near the source of supply of the alkaline salts. The chlorides and sulphates are to be accounted for by the proximity of the volcanoes, the volcanic activity in this region having evidently been accompanied by the evolution of quantities of hydrochloric and sulphurous acid gases, as in volcanic areas near the sea. Sulphuric acid is also derived from the oxidation of pyrites, which is often found in abundance in volcanic rocks, and may have contributed to form the sulphates.

The geology of the other soda lakes is like that of Lake Mono. Thus Owens Lake is in a basin which receives the drainage from a volcanic country, the rocks of which are much decomposed, and the ground in many places is covered with incrustations and efflorescences.

THE GREAT SALT LAKE.

Like Lake Lahontan on the west, another great Quaternary lake occupied part of the eastern side of the Great Basin. It is known as Lake Bonne-

ville, and its residual water is the Great Salt Lake. The predominating salts of the water of this lake are chloride of sodium, with some magnesium chloride and small quantities of sulphates. It would seem that the carbonate of lime which is brought in by the present drainage either goes down as a crystalline precipitate of carbonate, or decomposes some of the sulphate and remains in solution as sulphate. The rivers bring the carbonate of lime, and the springs, which abound in the neighborhood of the lake, supply the alkalies.

The neighborhood of the Great Salt Lake is volcanic. The flow of rhyolite probably preceded the formation of Lake Bonneville, while basalt both preceded it and was ejected during and after the lake came into existence. Some eruptions took place under water, and the old lake shores are found on some of the volcanic cones. The same material is, therefore, present in this region for supplying chlorides and sulphates and carbonates of the alkalies and lime as in the western part of the Great Basin, yet the sodium carbonates are wanting.

As sodium carbonate is found, therefore, in isolated occurrences, associated with the chloride and sulphate, and frequently gypsum, while the chloride and sulphate are often found without it, its origin is a matter of curiosity.

ORIGIN OF THE CARBONATE OF SODA.

The following chemical reaction may supply an explanation of the origin of natural carbonate of soda. It appears that the acid carbonate of sodium is formed in a dilute solution of the chloride of sulphate of sodium in the presence of calcium carbonate in suspension, by passing carbonic acid gas into the solution. The laboratory experiment on this point is said to have been mentioned by Brandes in 1826, and was more exactly described by Alexander Muller, of Stockholm, in 1859, who used the sulphate of sodium and found that gypsum was formed by the reaction. Dr. T. Sterry Hunt also describes the same reaction between carbonate of lime, sulphate of soda (and sulphate of magnesium), and carbonic acid. The experiments of Brandes and Muller are quoted by Hilgard and Weber, who repeated them in 1889, and showed that the reaction holds good for the chloride of sodium as well as the sulphate.

The composition of the waters of Great Salt Lake and its tributaries shows that they contain the same salts, although in different proportions, as those of the Lahontan Basin, except the carbonate.

The production of natural carbonate of soda in 1893 amounted to about 3,100 tons, of which one fifth was soda ash and crystal carbonate.

The Wyoming sulphate has received new attention in the last two years. In 1892, 1,670 tons of salt cake were shipped from the Laramie works. Improvements were being made in the works in 1893, and new plants for producing the carbonate were erected in other places in Wyoming during the year. These causes interfered with the production of both salts.

NATURAL BORAX.

The waters of the soda lakes contain small quantities of sodium borate, which the volcanic neighborhood easily accounts for. In various places in the arid regions of California, Nevada, and farther north, even into Eastern Washington, which is in the volcanic belt, there are deposits of borax and borate of lime, which have been worked more or less successfully. The origin of the soda and lime is to be ascribed to the feldspars of the volcanic rocks which furnish those bases for the boracic acid which was supplied by the volcanic emanations. The borates formed in this way were concentrated in lakes or ponds, in the same way as the carbonates, until crystallization took place. The present beds are former lake or pond deposits of this kind. An interesting occurrence is the lime borate at Calico, San Bernardino county, California, where the borate bed has been tilted up with the inclosing sedimentaries, until its edge forms a "vein," which is mined by shafts, drifts and stopes, as an ore deposit would be.

The production of borax in California and Nevada was 8,699,000 pounds in 1893, compared with 12,538,196 pounds in 1892, and 13,380,000 pounds in 1891.

The average value for 1892 and 1893 was 7½ cents per pound.

The falling off in production in 1893 was due to the general dulness of trade. The prices averaged 9¼ cents in 1884; in 1885, 8¼ cents; 1886, 6½ cents; 1887, 5½ cents. Then the Pacific Borax Company took hold of the industry, and in 1888 the price went to 7 cents, and from 1889 to 1894 it has been 7½ cents.

THE NITRATE DEPOSITS IN CHILE.

The desert of Atacama, in Northern Chile, is the seat of the large deposits of nitrate of soda which have been so extensively worked in the last ten or fifteen years.

The desert is bounded by the Andes on the east, and by the Coast Range on the west, and from these ranges and the larger mountain chains which divide the desert into four great basins, extend smaller spurs, which often inclose plains which are the beds of ancient lakes. The Coast Range abounds in igneous rocks, while modern eruptive rocks upheaving jurassic sediments form the eastern border. The plains of the desert itself are covered with the angular debris of volcanic rocks, and weathered masses of eruptives, covered with their own ruins, rise from the plain. The feldspathic decay of the volcanic rocks has left the chalcedony of the amygdaloidal rocks lying everywhere on the surface of the ground.

The nitrate is associated with salt, sulphate of sodium and gypsum, and is generally found on the hillsides, rather than in the center of the lake beds and marshes.

FORMATION OF THE NITRATES.

It is found on the hillsides, and often at great altitudes, and its origin is due to the decomposition of the feldspathic sands which form the slopes of the nitrate plains. The feldspars of the neovolcanic rocks, everywhere present in the district, contain up to 12 per cent.

of lime and 10 per cent. of soda, and therefore capable of furnishing all the bases found in the deposits. Sulphuric acid for the formation of the sulphates, is probably furnished by the oxidation of the pyrites, an invariable constituent of the rocks, and chlorine is constantly present in volcanic emanations. The guano deposits are almost always found near the niter beds, and are so near the surface that they are often laid bare by the horses' hoofs. An analysis of guano from Atacama gave 12 per cent. of nitrogen. This guano would, by nitric acid, produce the nitric acid necessary to form nitrates with the accompanying alkalis.

The process of obtaining the niter is simple. As it occurs at slight depth small pits are sunk into it, and explosives are introduced into small chambers at their bottoms, so as to throw down as much ground as possible when fired. The crude material is transported to the extensive works, at the coast to be lixiviated, in order to extract the niter, which is recovered by evaporation.

The nitrate beds of Southern California and Nevada have been frequently noticed, but have not as yet been systematically worked or adequately described.

Medical Notes.

Iodized Collodion as a Depilatory.—The *Union Medicale* publishes the following formula:

Alcohol.....	48 parts
Iodine.....	3 parts
Collodion.....	140 parts
Oil turpentine.....	6 parts
Castor oil.....	8 parts

This is to be applied to the hairy parts every day for three or four days.

Elimination of Poisons.—Various experimenters have proved that the following substances are eliminated from the system by the hepatic cells: the majority of all metallic poisons, such as arsenic, mercury, antimony, copper, lead, and zinc, also potassium iodide, spirits of turpentine, grape sugar, potassium chlorate, salicylic acid, indigo-carmin, sulphocyanate of potassium, alcohol, atropine, muscarine, strychnine, kairine, and atropine.

Thioform.—Dr. Joh. Julius Schmidt states (*Therap. Monat.*), this drug possesses, over iodoform, the advantages of odor and freedom from danger, so that it may be used over large wound areas without danger. Internally, it appears to be an acceptable intestinal antiseptic. It is a cheap, innocent, and pleasant dry dressing for wounds, without producing untoward symptoms, and aside from its general surgical applicability, it is especially useful in the healing of large wound-surfaces, as after burns or ulcerations.

Treatment of Eczema.—Fournier advises the use of the following instead of Helmerich's salve (purified sulphur, 10, potassium carbonate 5, water 5, lard 35, and almond oil 5 parts) which has been very popular in France; purified sulphur 10, potassium carbonate 8, lard 100. To make sure of giving relief in

inflammation of the skin the following may be used: glycerin 200, powdered tragacanth 5, precipitated sulphur 100, potassium carbonate 45, oils of peppermint, lavender, cinnamon and cloves, each 1½ parts.—*Deutsch. Med. Zeit.*

For the Night Sweats of Tuberculosis.—The most varied medicines have been recommended for this purpose, but for the most part have been of very little aid. Dr. J. A. Goldenbach (*Deutsch. med. woch.*) warmly recommends ergot for this purpose, stating that he has had the most astonishingly good results. The dose is 3 grammes (4½ grains) on going to bed. Latterly Goldenbach has used instead of powdered ergot the following: Extract of ergot 3 grammes, diluted alcohol, glycerin and water, of each 5 grammes. Of this one syringe full is injected hypodermically every evening.

Treatment of Diphtheria.—According to Läser (*Deutsch. Med. Wochenschr.*) 8 per cent. solution of citric acid kills a diphtheria bacillus in four to five minutes. While he does not consider citric acid as a specific Läser still thinks it is of much service under certain conditions. A Draer advises the insufflation of soziodol sodium in the treatment of diphtheria. It is also suggested that soziodol mercury may find use in this connection by combining one part of soziodol mercury, one of sodium chloride and forty-eight of precipitated sulphur. The addition of sodium chloride facilitates the solution of the mercury salts.

Cocaine; its indications and antidotes.—Dr. Mangano (*Deutsch. Med. Ztsch.*) has arrived at the following conclusions: (1) With correctly adjusted doses and accurate control of effect, cocaine is never contra-indicated for local anæsthesia and ischæmia. (2) As an anodyne, its action is uncertain, and, in heart disease, even dangerous. (3) The indications for the use of cocaine in nervous disturbances are very limited; it is to be forbidden altogether in the presence of cardiac affections. (4) It is also to be strictly avoided for producing a tonic, cardio-vascular effect, because it is to be regarded as a heart poison. (5) Elimination of cocaine from the organism proceeds pretty rapidly during 4-12 hours, while the effect upon the vascular system disappears, according, to the dose in 2 hours. (6) The most prominent and recommendable antidote of cocaine, after the latter has become absorbed, is caffeine, subcutaneously, or internally (less efficient). The dose of the antidote is to be determined by the degree of the toxic symptoms; the antidote never producing disturbances per se, since its influence can always be favorably modified by combining it with sparteine sulphate. The author sometimes applied as much as 3.5 grammes (54 grn.) of caffeine sodio-benzoate (which salt alone he considers certain of absorption by the organism) without observing any injurious phenomenon. (7) Impure cocaine is extremely dangerous to the cardiac function.—*Am. Med. Sur. Jour.*

Epilepsy Cured by Curare.—A Russian physician, Dr. A. Dobronravow, according to *La Semaine Medicale* had under treatment a boy sixteen years of

age, who, from infancy, had been subject to epileptic attacks, the aura of which was a tickling sensation in the right knee. In time the paroxysms gradually became more and more frequent. One day the patient was brought to the Saratow hospital in a fit. The convulsive spasms followed one after the other with a few minutes' interval. All the various drugs usually employed for combating epileptic attacks, such as the bromides in large doses, the iodides, antipyrine, borate of sodium, and chloral, were resorted to in vain. Finally, after twelve days of fruitless experiments with all sorts of remedies, Dr. Dobronravow had recourse to hypodermic injections of 6 milligrammes (1-11 grain) of curare, with the result that at first the intervals between the spasms were lengthened to several hours, and on the following day the paroxysms disappeared altogether. The patient only experienced slight fatigue in all the muscles in the right half of the body, and a vague painful sensation in the right knee. Five additional injections of from 6 to 7½ milligrammes each of curare were administered at intervals of five days. There have been no attacks since, although several months have elapsed since the treatment was discontinued.

The Physician and the Nostrum.

In the "Proceedings of the Washington State Pharmaceutical Association" we find a paper by Joseph S. Schlumpf of Seattle entitled "An Evil in Pharmacy" which will commend itself to many readers as a particularly breezy specimen of the attack pharmaceutical. Mr. Schlumpf's phraseology is strange and quaint and must have sorely tried the editor of the "Proceedings." The paper is an attack on the "nostrum cancer" and if certain physicians are roughly handled in the encounter, it is from no antagonistic spirit to the profession. This Mr. Schlumpf is careful to explain. He wonders why the physician prescribes nostrums.

"The M. D. wants a certain firm's make, and wants no other. He insists upon them and grows wroth when he don't get them. Why he wants them is a question. Has he a lack of faith in the pharmacist's ability or has he been influenced by the well-worded circulars that are the web into which he is inveighed into believing that a manufacturing concern has more ability than a well-posted pharmacist whom he is on familiar terms with and can judge in person? He has implicit confidence in some firm's product, not knowing anything about either firm or product; therefore he specifies Slugger & Co.'s Elixir I. Q. & S., Baldy, Saur's & Co.'s Vinum Pepsin, McGinty's Syr. Hypophosphites, Brown's Anti-Choke pills and Blitzenbauer's Anti-Magusolem antiseptic. It has come to pass that it will be but necessary to read and write a label and know its cost to be able to fill the bills as a prescriptionist."

The author made a careful perusal of recipe files in different parts of the State and found that out of 600 prescriptions only 176 were not specified prescrip-

tions or manufactured mixtures, either in whole or in part. "This is a very creditable showing," he says "for the various ready-made drug works, but a shameful one for the promoters of the evil, namely the physician. Why does the learned disciple of *Æsculapeus* deign to use newspaper self inflated remedies; is it because he has not the required knowledge, that he must fall back on remedies that are put on sale for a source of profit and not as good in purity and worth as his home druggist can give him. He has found a friend in *lactopeptine* with whom he battles dyspepsia in every form. The nerve is conquered and subdued in his rambunctious capers by *bromidia*. Our friend the kidney is not without a guardian, and Mr. F. E. Buchu is a dead bird. Diphtheria is a thing of the past; zymocide and others of his ilk have a pudding destroying him at \$8 per doz. 12-oz. bottles. Syrups de Pine Nut juggles a cough in mid air and our good old recipe Syrup Pruni Virg. etc., is not the laboratory product as of yore."

Mr. Schlumpf thinks the blame for much of the medical profession's encouragement of quackery "can be safely laid at the door of the younger class of medical men." In fact he says it can be proved so, by watching him as he leaves his college days to enlighten the world with his great knowledge, and relieve suffering humanity. "He leaves his Alma Mater with a set of stereotyped prescriptions for every ailment that flesh is heir to. He wants to make a record and actually does, so the undertaker can testify. Medical journals come to him. His knowledge in practical pharmacy is weak. He finds it hard to write for just what he wants. Having noticed in his journal that Mc-Meyerstein's Syrup of Anti-Tubercle is playing havoc with tuberculosis, it interests him. A patient calls at his office with the necessary tubercle, and he proceeds to condemn the tubercle to death by prescribing Mc-Meyerstein's Syrup (no other). His faith is strong. Why? Because the Mc-Meyerstein Chemical Company says their syrup can swipe any tubercle that ever tubercled and have strength left. It positively says no tubercle can resent its magic influence. The doctor's intentions are honorable enough, but he does not realize that Mc-M. is not putting up his syrup for his health, but for \$12.00 a dozen. It never occurs to him that the shrewd and wily Mc-Meyerstein is onto him and lots of others, and that by a series of advertisements he is able to control this faith for a long time."

All these compositions we are familiar with, and in order to succeed must be manufactured by some chemical company, tooted and bazooed around the country, and they will succeed. How difficult it would be for a dispenser to compound such preparations as Amykos asepin, Analeptine Cordial, Filous Hypophosphites and how terribly it would act on the M. D.'s nervous system to write out such a prescription.

The persistent free application of melted lanolin to an old wrinkled skin, will surely restore a fresh and smooth appearance.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Cream of Roses. S. R. F.—Funk's Cream of Roses, Helmboldt's Jelly of Glycerin and Roses and Espey's Cream, all resemble one another very closely in composition and may be practically duplicated by proceeding as follows:

Tragacanth, powdered.....	25	grains
Glycerin.....	1	fl. ounce
Alcohol.....	4	fl. ounce
Water.....	6 1/2	fl. ounces
Boric acid.....	40	grains
Spirit of lavender.....	1	fl. dram
Spirit of bergamot.....	1	fl. dram

Blue black ink.—F. L. The use of logwood is necessary in preparing an ink of any permanency, as aniline colors cannot be depended upon either to withstand age or exposure, or to make a lasting impression on the paper fibre. The formula given herewith is recommended as furnishing an ink that flows readily from the pen and changes rapidly from a blue to a deep black on exposure.

Extract of logwood.....	3 1/2	drams
Potash alum.....	20	grains
Indigo carmine.....	30	grains
Iron sulphate.....	6	grains
Copper sulphate.....	4	grains
Potash bichromate.....	4	grains
Gum arabic.....	3	grains
Distilled water.....	2 1/2	fl. ozs

Dissolve the extract of logwood in 1 ounce of distilled water; then dissolve the other ingredients in the remainder. Mix, let stand to settle, and decant.

Haine's Golden Specific.—A. H. H. asks a formula for the above named "or any similar compound." He would also like information as to the efficiency of preparations of their class.

The "Specific" is understood to have the following composition:

Bay berry root, powdered.....	16	ounces
Ginger, powdered.....	8	ounces
Capsicum, powdered.....	1	ounce

Mix.

With regard to the efficiency of preparations advertised as cures for the liquor or opium habits, it may be said that the cure depends largely upon the amount of faith imbibed with the alleged specifics. An inordinate appetite for liquor is not so much the result of a diseased body as a diseased mind, and if the patient can be hoodwinked or made to believe that it is possible by drugs to acquire a lasting dislike for alcoholic stimulants half the cure is accomplished. The atonic condition so often observed in cases of habitual drunkenness can usually be overcome by the administration of suitable tonics. A mixture of cinchona, nux and dilute hydrochloric acid is used with favorable results by many New York specialists. It is alleged in some quarters that the success of the Keeley cure depends largely upon the effect produced by doctored whiskey. The patient is given whiskey in which apomorphine muriate is dissolved, and finding that nausea ensues after each

dose taken, he comes to the conclusion that whiskey no longer agrees with him and abjures it for the time being. As soon, however, as the memory of the nausea becomes dim and circumstances are favorable, the patient may return to his old habit of taking a "bracer" and finding that no ill effects follow, it usually happens that caution is neglected and over indulgence follows. The sequel of over indulgence is too well known to require elaboration in these columns. To any one about to take "liquor specifics" for the cure of inebriety, we would give Punch's famous advice, "Don't."

Liquid Glue.—M. D. L.—The following recipe is said to furnish a satisfactory article.

	parts.
Gelatin.....	100
Glue.....	100
Alcohol.....	25
Alum.....	2
Acetic acid (20%).....	200

Mix and heat on a water for about six hours or until solution is effected.

Enamel Polish.—W. W. S.—We do not know of any special composition for polishing enamel. The common method of applying a polish is to rub the surface vigorously with a cloth dipped in kerosene oil.

Hostetter's Bitters.—J. A. R.—The following is given as the composition of Hostetter's Bitters:

Calamus.....	2	pounds
Cinchona.....	2	pounds
Bitter Orange.....	2	pounds
Gentian.....	2	pounds
Calumba.....	2	pounds
Rhubarb.....	2	pounds
Cinnamon.....	4	ounces
Cloves.....	4	ounces
Diluted Alcohol.....	4	gallons
Water.....	2	gallons
Sugar.....	2	pounds

Reduce the drugs to a coarse powder, then mix and percolate the mixture with diluted alcohol until 4 gallons of the tincture are obtained. Dissolve the sugar in the water and add to the percolate.

For a series of formulas for bitters we must refer you to the files of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

Illustrated work on Botany.—E. P. F. writes: "Kindly inform me if you know of such a thing as an illustrated work on botany in natural colors. I want to get a set of colored plates showing the exact appearance of all U. S. P. botanical drugs in their state of growth."

Bentley & Trimens' "Medicinal Plants," published by J. & A. Churchill, 11 New Burlington street, London, Eng., comes most near to meeting our correspondent's requirements, but it does not contain descriptions of all the drugs and plants official in the U. S. Pharmacopoeia.

Label Varnish.—M. D. L.—A satisfactory varnish can be made from the following formula:

Sandarach.....	6	drams
Mastic.....	2	drams
Camphor.....	6	grains
Oil lavender.....	30	minims
Venice turpentine.....	24	grains
Ether.....	30	minims
Alcohol.....	3	ounces

Place all in a suitably corked container, and shake frequently until dissolved.

Percentage Solutions.—V. P. C. writes: "Please publish in your next issue a table or formula of percentages, for 1 up to 10 per cent. For instance, how much cocaine would there be in a fluid ounce of a 10 per cent. solution."

The common practice is to multiply the figures representing the quantity of fluid desired by the figures representing the required percentage; the product is then divided by 100 and the result expressed in grains by weight or minims by measure. Thus the amount of cocaine contained in a fluid ounce of a 1 per cent solution of the salt may be found as follows: $456 \times 1 = 456 \div 100 = 4\frac{1}{2}$ grains. According to this rule 1 ounce of a 10 per cent solution would require $456 \times 10 = 4560 \div 100 = 45\frac{1}{2}$ grains approximately.

In preparing these solutions the use of the metric system should be cultivated in preference to the old system. By this means, any percentage solutions may be expressed in 1 gramme for each per cent. in each 100 cubic centimeters. Thus 250 Gc of a 4 per cent. solution of boric acid: $250 \times 04 = 10$ grammes. In this connection the article by C. A. Macpherson on "Percentage Prescriptions" in *AMERICAN DRUGGIST*, Vol. xxiv, 14, p. 170 may be read with advantage.

Prescription Query.—G. C. D. writes—"Can you direct me how to compound the enclosed prescription without forming a greenish yellow gelatinous precipitate. I have tried it in various ways and have failed."

The prescription reads:

Ferri pyrophosphate..... 3 ii
Strychnine..... gr. i
Acid arsenious..... gr. ss
Acid phosphoric, dil. Syrup Zingiberi..... aa 3 ii

This query, or one of similar character comes up so often and is answered so regularly that it is surprising any physicians or pharmacists remain ignorant of its solution.

The turbidity and gelatinous precipitate complained of, is due to the insolubility of the iron pyrophosphate in the diluted orthophosphoric acid, presuming of course, that you have employed the official acid in preparing the prescription. A clear mixture cannot be produced unless scaled phosphate of iron is substituted in place of the pyrophosphate, or diluted metaphosphoric acid (N. F.) is substituted for the official tribaric acid.

Correspondence.

The Asheville Meeting.

Editor AMERICAN DRUGGIST:

If I am correct, I think that you made a mistake (typographical error most likely) in the time of meeting of the A. P. A., at Asheville, I think you had it September 8, when it should have been September 8. Now I may be in error myself as to the *AMERICAN DRUGGIST* AND *PHARMACEUTICAL RECORD* and it may have been some other journal. I have not it by me at present to refer to. I see some other pharmaceutical journal had it September 5, so it would not be amiss to call attention to the matter.

We expect and hope to see a large delegation from New York in attendance during the session of the A. P. A. at Asheville. We will give you a most cordial reception, and I feel assured that you will be delighted with your visit to the Tar Heel State. The meeting promises to be the most largely attended of any we have had for many years.

WM. SIMPSON,

Secy. N. O. Board of Pharmacy.

RALPH, N. C., July 27.

"African Kolas."

Editor AMERICAN DRUGGIST:

Among the unusually interesting articles of your issue of July 25, the one on Kola Redivivus has my notice. Will you kindly inform me where I may obtain Dr. E. Heckel's monograph on "The African Kolas" which is referred to in said article? LOUIS EMANUEL.

PITTSBURGH, Pa., July 30.

[The "African Kolas" is a French publication lately issued by Prof. Edward Heckel of the Marseilles School of Medicine and it can be had through any firm of importing booksellers. We have ordered copies for some of our subscribers through Gustave E. Stechert, 817 Broadway, New York City.—Ed.]

Bibliography.

TEXT BOOK OF MEDICAL AND PHARMACEUTICAL CHEMISTRY. By Elias H. Bartley, B.S., M.D., Professor of chemistry and toxicology in Long Island College Hospital; Dean and Professor of organic chemistry in the Brooklyn College of Pharmacy, etc., etc. Third edition, revised and enlarged. With eighty-four illustrations. Philadelphia: P. Blakiston, Son & Co., 1,012 Walnut street, 1894. [83.]

The issuance of a third edition of any book within a decade of its first appearance may be taken as a fair indication of its popularity and usefulness. The present work first saw the light in September, 1885, when the author discovered the need of a text book of chemistry for medical students, which would not be too voluminous in extent nor contain matter not directly bearing upon the science. The task of selecting material from the great mass of scattered information bearing upon the subject must have entailed unusual labor, but the gain to students which has resulted is great.

While Dr. Bartley's work is intended chiefly as a text book for medical students, its arrangement is such as to make it eminently useful as a reference book for all students of chemistry without regard to class.

DICTIONARY OF THE ACTIVE PRINCIPLES OF PLANTS, alkaloids, bitter principles, glucosides. Their sources, nature and chemical characteristics, with tabular summary, classifications of reactions, and full botanical and general indexes. By Charles E. Sohn, F. I. C., F. C. S. London: Baillière, Tindall and Cox. Philadelphia: J. B. Lippincott Company. 1894. [83.]

This work contains a valuable mass of desirable information concerning the proximate principles of plants. Its arrangement groups together the constituents, either of one or of a number of botanically or chemically allied plants; but a purely alphabetical arrangement has not been followed. In enumerating the properties and tests of the different plant constituents, the author mentions first, the official name of the plant, and follows this with full botanical, general, physical and chemical details; solubility; reactions with precipitants; and color tests.

Thus to give an example and illustrate its value, we will take the author's enumeration of the properties and tests of *Ipecacuanha*:

Ipecacuanha, etc.; *Rubiaceae Cinchonaceae*, etc. Emetine in the following: *Cephaelis Ipecacuanha* (Hooper found following quantities of (a) [emetine] in plants grown in India: root 1.70, leaves 1.45, stalk, 1.13 per cent.; none in seed.—Plückiger); *Ronbia emetica*, Richard. (*Psychotria emet.*, L.); *Ionidium Ipec.*, Venten (*Viola Ipec.*, L.); *I. indecorum*, St. Hil.; *Richardsonia scabra*, St. Hil. (*Richardia scabra*, L.); doubtful in *Chilococca racemosa*—*Rubiaceae* (Cainca root, see *Chilococca*). The substances (b) [Violine] (c) [*Viola-quercitrin*] in *Viola odorata*

(violet) the root. [For "White Ipec. from Isle de France" see *Tylophora*; for "East India Ipec." see *Chamelirium*.]

(a) EMETINE A.

Numerous formulae have been suggested by Lefort, Würtz, and others, viz.: $C_{20}H_{22}N_2O_8$, $C_{20}H_{22}NO_8$, $C_{20}H_{22}NO_{10}$, $C_{20}H_{22}NO_{12}$, the latter, by H. Kunz. Amorphous or crystalline (needles or plates); melting point 50° – 70° (different observers); optically inactive, bitter, alkaline, fluorescent (blue), emetic.

SOLUBILITY.

Soluble slightly in cold water, or 1 in 1,000 at 50° C., very readily in alcohol and chloroform; also in hot ether, hot petroleum ether, in benzene, methyl and amyl alcohols, oils, turpentine, acetic acid. Dissolved difficultly by ether and petroleum ether in the cold.

Removed from alkaline solutions by chloroform, amyl alcohol, and in traces by benzene and petroleum ether. Not extracted by solvents from an acid solution.

PRECIPITANTS.

Alkaline hydrates.
Ammonia.
Alk. carbonates insoluble in excess.
Alk. bicarbonates.
Tannic acid, pp. if a little free hydrochloric acid; 1 in 5,000.
Picric acid, yellow amorphous; 1 in 25,000.
Platinum chloride, yellowish-white; 1 in 2,500.
Gold chloride, lemon-yellow amorphous; 1 in 2,500.
Potass. ferrocyanide, 1 in 1,000.
Potass. sulphocyanide, yellow; 1 in 2,500.
Potass. chromate (avoid excess) 1 in 5,000.
Potass. bichromate, gradually yellow; 1 in 3,000.
Phospho-molybdic acid, yellow; 1 in 25,000.
Iodo-potassic iodide
Bismuth-potassic iodide 1 in 25,000.
Cadmium-potassic iodide, yellow amorphous; 1 in 25,000.
Mercuric-potassic iodide, yellow amorphous; 1 in 25,000.
Mercuric chloride, white; 1 in 1,000; cloud in 3,000.
Potassic nitrate } white.
Sodic nitrate }

COLOR TESTS.

Concentrated sulphuric acid, dissolves slowly, dirty brown.
Concentrated sulphuric acid, with potass. bichromate, brown.
Concentrated sulphuric acid, with nitric acid, brownish-green.
Nitric acid, yellowish-brown.
Fröhde's reagent, red changing gradually to green; 1 in 100,000 (reliable, Dragendorff); concentrated hydrochloric acid added to this, deep blue.

VIOLINE.

(b) Violine A. (possibly Emetine?); pale yellow amorphous, fusible, bitter, emetic.
Soluble in water more readily than Emetine; in alcohol less readily than Emetine; scarcely in ether.

VIOLA-QUERCITRIN.

(c) *Viola-Quercitrin* G., $C_{40}H_{60}O_{26}$; yellow crystalline; convertible by acids into 3 molecules of sugar and 1 of Quercetin (see *Quercus tinctoria*). Gives fluorescent solutions with alkalis.

The number of substances described amounts to nearly 600 and the space apportioned to each is evidently determined by the chemical and pharmaceutical value of the body under consideration, cinchona and its derivatives occupying 10 pages; opium a little over 9 and strophanthus about a page. The work should prove of great utility to pharmaceutical instructors, analysts, chemists and students generally, and its value is likely to find prompt recognition at the hands of chemists and manufacturers.

THE MEDICINAL PLANTS OF TENNESSEE. Exhibiting their commercial value, with an analytical key, descriptions in aid of their recognition and notes relating to their distribution, time and mode of collection and preparation for the drug market. Arranged and published under the direction of T. F. P. Allison, Commissioner of Agriculture. By A. Gattinger, M.D., Nashville, Tenn., 1894. Franc M. Paul. Printed for the State.

There has just been issued by the Commissioner of Agriculture, Hon. T. F. P. Allison, a treatise on the Medicinal Plants of Tennessee, prepared by Dr. A. Gattinger, the well-known botanist, which will, no doubt, have great influence in developing an industry heretofore almost unknown in the State, and one that should give profitable employment to many Tennesseans. The first part of the book

contains the Analytical Key, embracing all vascular plants of the Tennessee Flora, particularly those of the medicinal species; then follows a description of medicinal plants, their distribution throughout the different sections of the State, the time and mode of their collection, etc. This description, though necessarily given in the terms of the botanist, is rendered sufficiently plain to the ordinary understanding by a well arranged and copious glossary, which gives brief and easily comprehended definitions of the unfamiliar words of the text. With the aid of this glossary, no one of ordinary intelligence can fail to acquire, in a very short time, sufficient knowledge of the structure, appearance, and other characteristics of the plants he may desire to collect, to guide him in his work. The table of comparative prices paid by manufacturing pharmacists, and the rates charged for the prepared drugs is made up from the latest quotations furnished by leading dealers and manufacturers in the United States, and will prove a great aid to persons who may incline to engage in the business. The index to the work is comprehensive and well arranged.

Commissioner Allison has certainly done a good and a wise thing in directing the attention of the people to this industry, so long overlooked, but which now, with the aid of the excellent treatise under notice, is sure to awaken a lively interest in the State, and be the means of adding one more to the many natural resources of Tennessee. In North Carolina, a State scarcely as rich in its plant growth as Tennessee, the business of collecting and shipping to market the native medicinal plants has been extensively engaged in and with much success, and the venture has brought substantial returns, both to the people who gather these riches of the forests and fields, and the dealers who purchase and handle them in the way of trade.

A list is given of prices offered and asked for botanical drugs in 1894, which is very full and complete, but which is, we fear, rather misleading. In this list the "selling" prices are all too high to be taken as a guide for the producer or gatherer. In fact, even the so-called "buying" prices are in many cases above what the gatherer can expect to realize, being nearer the price at which they are sold in the New York market in round lots, than the price at the source of supply.

The book will be furnished free to the citizens of the State who desire to make practical use of the information it contains, but has not been published for indiscriminate purposes.

DESCRIPTIVE CATALOGUE OF ESSENTIAL OILS AND ORGANIC CHEMICAL PREPARATIONS. Compiled by Frederick B. Power, Ph.G., Ph.D., Director of the Laboratories of Fritzsche Brothers, at Garfield, N. J. Published by Fritzsche Brothers, New York and Garfield, N. J. Branch of Schimmel & Co., Leipzig and Prague. For sale by B. Westermann & Co., 825 Broadway, New York, (\$1.00).

The work embraces, in a systematic and comprehensive form, and in alphabetical arrangement, not only all the official and ordinary essential oils met with in commerce, but also a large number of rarer products which have been prepared at various times for strictly scientific or experimental purposes. In connection with each article the botanical source, physical characters, and chemical composition are given with other special tests for purity when such are known. The work is divided into three parts, comprising: 1. The official essential oils, or those recognized by the U. S. Pharmacopoeia of 1890,

together with some closely related oils. 2. Non-official essential oils. 3. Organic chemical preparations.

Among the latter, are included a large number of interesting bodies which represent the individual and well-defined constituents of essential oils, such, for example, as *carvol*, *eucalyptol*, *eugenol*, *linalool*, *menthol*, *thymol*, etc.

The work is concise in its character, contains a considerable number of references to publications embodying the more important original investigations, and the endeavor has been made to present an accurate record, up to the date of publication, of all the essential and well-substantiated facts relating to the characters and composition of the oils and chemical preparations considered in the work.

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 87 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

THIS issue contains the answers to the last of the series of questions extending over the fifteen issues of this journal concluding with the issue of June 29th. The names of all those winning prizes in that competition will be announced in the next issue of this journal and the announcement will be accompanied by biographical sketches of the prize winners.

Answers to Questions, 15th Series.

161. Percolate means to trickle or run slowly through, and re-percolate means to run through again. A finely divided drug, (fineness varies with the drug), is moistened with some liquid which experience has taught us is fitted for the purpose and placed, with more or less pressure, in a cylindrical or conical tube known as a percolator. At the lower end this tube is drawn down to a small diameter and a rubber tube is attached which terminates in a glass tube, which is held up above the level of the liquid in the percolator. The same kind of liquid which was used to moisten the powder is now poured carefully in upon the top of the powder in the percolator, the top of the percolator is tightly covered and the contents are allowed to macerate for a few hours. The tube connected with the base of the percolator is now lowered until the liquid comes out at the rate of about 15 to 80 drops per minute. The supply is kept

up from above, and as the menstruum goes down it dissolves out the soluble parts and becomes richer and richer until it drops into the bottle placed to receive it clear and strong. The percolate becomes weaker and weaker as successive portions come down until at last it runs through colorless and tasteless and we say the drug is exhausted. The disposition to be made of this liquid (percolate) will depend upon the product we are after. If it is a fluid extract, we reserve the first seven or eight tenths and evaporate the balance and add it to the reserved portion. In re-percolation we proceed in the same general manner as regards the percolator and the maceration etc., but we divide the drug into small portions and percolating one of these, reserve the first portions as strong percolate, then percolate to exhaustion, and with this weak percolate moisten the next portion of the drug, reserve as before, and so proceed. The last weak percolate is put away until the operation is to be repeated.

162. Titration is a mode of chemical analysis in which the quantity of a certain constituent in a given substance is ascertained by determining the quantity of known solution of standard strength (Titre-standard) that is used to change the constituent into some other form. The change is indicated by a change of the color or the production of a precipitate, and the substance added in determining the end of the reaction is called an indicator. Litmus, eosin and phenol phtalein are among these indicators. This method of analysis is also called volumetric, since all solutions are measured in accurately graduated burettes, flasks, etc. The metric system is used almost exclusively for this work. Titration is one of the most rapid and accurate methods of determining the strength and value of different chemicals and food products. The strength of vinegar is thus ascertained, as is also that of solutions of different salts and acids, of bleaching powder, etc.

163. Infusion is the process of obtaining the water soluble medicinal portions of organic drugs by the action of hot or cold water; cold water being used when a volatile or active principle is present which would be injured or destroyed by hot water. Hot water also sometimes dissolves some parts which are not wanted and whose presence interferes with the best action of the drug. U. S. P. infusions, unless specified to the contrary, are of a strength of five per cent., and are made by the following formula:

Coarsely comminuted drug..... 50 grams.
Boiling water..... 1,000 Cc.

Pour the water upon the substance, placed in a proper dish; cover, let stand one-half hour; strain, and through the strainer pour on enough water to make the infusion up to 1,000 Cc. Tea is made in this way, and the various medicinal infusions are other illustrations.

164. As the word indicates, a decoction is made by boiling drugs with water, U. S. P. decoctions are of 5 per cent. strength and made as follows:

Coarsely-ground drug..... 50 grams.
Water..... 1,000 Cc.

Put the drug into a suitable vessel, pour cold water upon it, cover and boil for fifteen minutes; let cool to 40° C. express, strain the liquid and add, through the strainer, enough cold water to make the decoction measure 1,000 Cc.

The old-fashioned herb teas, catmint, boneset, etc., are illustrations of domestic decoctions, as also are the every-day methods of making coffee.

165. To macerate is to soak and soften in

a fluid. Maceration makes it possible for the fluid to find its way to all parts of the drug and thus attack and dissolve out the soluble parts. In the present method of percolation maceration precedes the drawing off of the percolate, and in former times it was the principal method of making tinctures. In cheese factories they make a rennet extract by macerating the rennets in salt water and glycerin.

166. Solution takes place when solid substances assume the fluid state through the agency of liquids, as when a salt is dissolved in water. If the salt is added to hot water as long as any is dissolved, then allowed to cool, some salt will crystallize out and the solution is said to be supersaturated.

Pharmacopoeial solutions are distinguished as, "All aqueous solutions without sugar, in which the substance acted upon is wholly soluble in water, excluding gaseous and volatile matter. The solvent power of different liquids for the same substance varies widely, and is dependent upon the temperature and fineness. As a rule, hot liquids are better solvents than cold, but in the case of lime this is reversed. Among the pharmacopoeial solutions are lime water and Monsel's solution.

167. Circulatory displacement is a process of making solutions, in which the salt to be dissolved is placed in a piece of gauze or other porous tissue and suspended in and near the surface of the liquid. The solution proceeds rapidly; the liquid in contact with the salt by becoming saturated and heavier descends to give place to less saturated portions, so as to cause a kind of circulating motion in the solvent.

168. Filtration consists in separating suspended particles from a fluid containing them by passing the fluid through a medium having pores or openings large enough to pass the fluid but stopping the solid particles. Cloth, sand, gravel, unglazed earthenware and unsized paper are used as filters. Cotton respirators are air filters, and we are familiar with the constantly used water filters, and the unglazed paper filters of our drug stores, used in filtering tinctures, solutions, essences, etc.

169. Clarification means a method of making liquids clear from the minute and flocculent matter they often contain, and which filtration is unable to remove. (Clarification) consists in adding some substance to the liquid which shall undergo a change, generally coagulation, and as it falls to the bottom drag all the finely divided suspended matter down with it. Among the materials used for clarifying, are egg albumen, alum, milk, gelatin, fish skins, bladders, page pulp, terra alba and a host of others. The old fashioned practice of cleaning coffee by egg shells and cod fish skins was a homely illustration of clarifying while the brewer now clarifies ale and beer with fish sounds.

170. Decanting is one of the simplest methods of separating a liquid from a solid having a greater specific gravity. In making decoctions and infusions we decant the liquid from the water soaked drug. We gently tip any vessel containing a sediment we desire to separate, and then by slow pouring we obtain the liquid quite free from sediment. We can facilitate matters by holding a glass or other rod up to side of the vessel from which we are pouring. Sometimes a siphon is used to avoid lifting or moving the vessel. Whiting and many precipitates are thus separated and washed or purified. In the manufacture of starch we use this method

of separation very extensively.

150. [An error was made in the answer to question No. 150. In asking that question the leaves of eriodictyon glutinosum was in mind, this plant, belonging to the natural order Hydrophyllaceae, having been made official in the Pharmacopoeia of 1890. In publishing the answer this drug was overlooked.]

Questions, Third Series.

POSOLOGY AND METROLOGY.

References: Wood's, Potter's or Hare's Therapeutics the dispensatories.

State the average dose of the following drugs.

21. Eriodictyon.
22. Ergot.
23. Rhus glabra.
24. Chestnut leaves.
25. Diluted hydrocyanic acid.
26. Give the rule for converting the centigrade, Reaumur and Fahrenheit scales into each other.
27. What is the weight in water of 50 grains of beeswax. Give the actual figures observed in practice and state the exact method of procedure.
28. If a balloon and its car loaded weigh 79 pounds how many cubic feet of pure hydrogen gas would it take to lift it, theoretically.
29. What volume would be occupied by a mixture of one hundred ounces each of chloroform and ether.
30. Describe a simple burette and state the advantages it possesses as a measure over a graduate.

Names of Students Whose Grade Stood 75 on the 15th Series.

E. Q. Anwalt, Philadelphia.
James Banks, Middletown, Pa. H. J. Barber, Alton, Ontario, Canada. J. C. Boyer, Wisconsin.
Pa. T. H. Brennan, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponstien, S. Dak. G. E. Barksdale, Richmond, Va.
Miss Maude Florence Cain, Lancaster, Pa.
J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centerville, Tenn.
H. J. Force, Newark, N. J.
William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.
Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.
A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada.
H. G. Laval, Gouverneur, N. Y.
C. J. McCloakey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradley, Pa. John R. Murray, Centerville, Tenn.
W. B. Nethery, Toronto Junction, Ont.
Edward L. Page, Lancaster, Pa. J. H. Pratt, Birmingham, Ala. P. H. Peters, Henderson, Mich.
A. V. Rand, Wolfville, N. S.
Aber Y. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. W. E. Smurl, Parsons, Pa. W. A. Sickel, Snow Shoe, Pa. W. Scallin, Mitchell, S. Dak.
Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va.
W. H. Van Strander, Winsted, Conn.
Bertie Ward, Orange, N. J. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.
Miss Emma A. Wiggins, Exeter, N. H.

Aromatic Cod-Liver Oil.—E. Dieterich gives the following formula for aromatic cod-liver oil:

	Parts.
Cod-liver oil	1,000
Lemon oil	5
Eucalypti oil No. 40	5
English peppermint oil	1
Vanilla	75
Cumarin	100

The two last ingredients are dissolved in the ethereal oils and the solution is admixed with the cod-liver oil.

Examination Questions of the University of Toronto, Department of Pharmacy.

PHARMACY.

PHARMACEUTICAL ASSAYING.

1. (a) Outline a practicable method for determination of alkaloid in a tincture or fluid extract of a plant-drug (assuming the native alkaloidal salt to be a tannate) fixed oil being also an extracted constituent. (b) State alkaloidal requirements for official Citrate of Iron and Quinine. (c) Give method of assay.

ALCOHOL.

2. (a) Mention the official simple alcohols. (b) Explain difference between Absolute Alcohol, Rectified Spirit and Proof Spirit. (c) Given commercial alcohol, sp. gr. 0.820, containing 91 per cent. absolute alcohol by weight; how much shall be used to make two Imperial pints of Spiritus Tenuior, and how much water?

STORING CHEMICALS.

3. State the conditions governing the proper storing of the following, giving reasons in full:

(a) Santoninum. (b) Syrupus ferri iodidi. (c) Spt. ætheris nitrosi. (d) Ether purus. (e) Hydrargyrum cum creta. (f) Liquor chlori. (g) Oleum amygdalæ amaræ. (h) Potassii permanganatis.

PILL MAKING.

4. (a) Mention the properties of a model pill mass. (b) What are essential features to perfect manipulation in addition to the selection of a proper excipient? (c) On what grounds should pill varnishing be condemned? (d) What is keratin, and why is it used in pill coating? (e) Mention a superior coating, having the same object in view, and state method of application.

5. Describe methods of manipulation essential to the exhibition of each of the following in pill form:

(a) Potassium iodide. (b) Creosote. (c) Camphor. (d) Silver oxide. (e) Potassium permanganate.

SPIRITUS ÆTHERIS NITROSI.

6. (a) State method of preparation. (b) Give reasons for use of each ingredient. (c) Indicate the resulting reaction by equation. (d) State pharmacopoeial requirements as to strength. (e) Outline method of testing its strength, indicating reactions. (f) Mention its incompatibles.

DETECTION OF ADULTERATIONS.

7. Give methods for determining presence of:

(a) Hard paraffin or earth wax in Cera Flava. (b) Alcohol in volatile oils. (c) Phosphorous acid in phosphoric acid. (d) Ferrous salt in liq. ferri perchloridi fort. (e) Iodate in potassium iodide.

ACETANILIDUM.

8. (a) How prepared? (b) Chemical formula. What chemical test distinguishes it from (c) Phenacetin, (d) Phenazone? (e) Which of these three popular antipyretics is freely soluble in cold water? (f) Which is incompatible with spirit of nitrous ether?

DOSES.

9. Give important medicinal constituent, strength and dose of each of the following:

(a) Tinct. nucis vomicæ. (b) Opium. (c) Ext. cinchonæ liq. (d) Tinct. strophanthis. (e) Ether. (f) Pil. saponis co.

(g) Syr. ferri iodidi. (h) Liq. morphinae sulphatis.

OFFICIAL NAMES.

10. State official names of (a) Pil. rufi. (b) Lait Virginalis. (c) Elixir proprietatis. (d) Jesuit's balsam. (e) Liver of sulphur. (f) White precipitate. (g) Brown powder.

PRACTICAL PHARMACY.

1. Prepare ointment of nitrate of mercury in accordance with the following formula, submitting the product and the answers to the subjoined questions.

UNGUENTUM HYDRARGYRI NITRATIS.

Mercury.....	2.00
Prepared lard.....	9.10
Nitric acid 42°.....	5.68
Olive oil.....	14.19

(Solids by weight, liquids by measure.)

Dissolve the mercury in the nitric acid, using gentle heat. Fuse the lard in the olive oil, and while the mixture is at a temperature of about 70° C., add the above solution—also at the same temperature—mixing them well. If the mixture does not froth very soon after mixing, increase the heat until it does. Stir well while cooling.

(a) Write equation indicating reaction of nitric acid on mercury.

(b) State reasons for employing heat in making this solution.

(c) Why should excessive heating be avoided?

(d) What change do the fats undergo while preparing the ointment?

(e) Why should "frothing" be forced?

(f) State necessity of stirring mixture well while cooling.

(g) What might result if the acid should happen to be under strength?

2. Ascertain the specific gravity of the powder submitted (showing all calculations) and report on the same as indicated below:

(a) Number of powder.....
(b) Weight of powder taken.....
(c) Weight of an equal volume of water.....
(d) Specific gravity of powder.....

PRACTICAL DISPENSING.

NOTE.—Candidates will dispense the following preparations with neatness, accuracy, and dispatch, labelling and finishing the medicines, as if designed for patients. The order and cleanliness in which each dispensing desk with its stock of utensils is left, will be rated.

Ext. belladonnae.....	gr. xx
Hydargyri oxidii rubri.....	3 jss
Axungia porcina ad.....	3 vj

Misce s. a. et ft. ung.

Sig. Saepe ad humerum dexterum applicandum.

Plumbi acetatis.....	gr. i jss
Opil pulv.....	gr. ss

M. fac pilulam et dentur tales doses decem.

Sig. Cap. pil. ter quaterter die.

Olei jecoris aselli.....	f 3 jss
Croosoti.....	f 3 j
Olei menthae pip.....	gtl. v
Pulv. acaciae (opt.).....	q. s
Aquam ad.....	f 3 iv

M. ft. emuls.

Sig. Exhibe cochl. parv. ij ex cyatho lactis post prandium et post cenam quotidie.

Magnesia carb.....	3 ss
Rhei pulv.....	3 j
Tragacanthae pulv.....	gr. x
Aquam ad.....	f 3 iv

M. ft. mist.

Sig. Coch. ex cyatho aquae mane meridie et vespere.

Ext. belladonnae.....	o.06g
Plumbi acet.....	o.09g
M. ft suppos. et mitte tales quatuor.	
Sig. Statim utend. et repetend. p. r. n.	

PRESCRIPTIONS.

1. Give translation of the following, as nearly literal as possible:

R. Quininae disulphatis grana triginta, instilla à limone recente quantum sufficit succi ad quinam solvendam et adde aque uncias decem, et strychninae sequigramum.

Signa. Misce fiat mistura cujus sumat cochleare unum maximum bis in die, circa horam undecimam matutinam et quartam horam pomeridianam.

2. Expand into full Latin and give literal translation:

Ferri carb.....	3 iijss
Rhei pulv.....	gr. xxv
Ol. anthem.....	gtt x
Conf. rose.....	q. s

M. st ft. mass. in pil. XL div. et sig. sum. sger iij octavis hor.

3. Write the following expressions without abbreviations and translate: (a) Cras noct. sumend. (b) Aq. astrict. (c) Har. pil. sum. iij. (d) M. et instilla gtt. iv auri p. r. n. (e) Ft. pulv. emetic statim sumend. (f) Mitt. in vitro chart. nig. involuto. (g) Div. in part. duodec. quarum cap. i secund. vel tert. quaque hor., ex cyath. parv. lact. vaccini recent. absente febre. (h) Si. feb. adest. (i) In latus aut dext. aut sinistr.

Translate the following prescriptions, criticise freely and state how you would meet any difficulties which might arise in dispensing:

4. Potassii chloratis.....	3 iij
Cocaine hydrochloratis.....	gr. i ss
Mellis depurati.....	f 3 ss
Aquam puram ad.....	f 3 iv

Misce ft. solutio.

Sig. Gargarisma. More dictu saepe utend. de die in diem.

5. Ammonii chloridi.....	3 iij
Hydargyri perchlor.....	gr. j
Potassii iodidi.....	f 3 j
Tinct. calumbae.....	f 3 j
Tinct. zingiberis.....	f 3 i ss
Morphinae hydrochlor.....	gr. jss
Aque q. s. ft.....	f 3 iv

Misce ft. mistura.

Sig. Cochl. mod. ex cyatho aq. ter quaterter die sumend.

6. Potassii iodidi.....	3 jss
Tinct. gent. comp.....	f 3 iv
Spt. aetheris nitrosi.....	f 3 iij
Acidi nitromuriatici dil.....	f 3 iij
Syr. aurantii.....	f 3 iv
Aquam ad.....	f 3 iv

Misce ft. mist.

Sig. Capiat cochl. ex paululo aquae frigidae post cibos.

7. Tinct. ferri perchlor.....	f 3 iij
Liq. ammon. acet.....	f 3 iv
Glycerini.....	f 3 i

Misce ft. mist.

Sig. Cochl. medium omni biborio primo die deinde tertia quaque hora si tussis increbuerit.

8. Chloralis hydratis gr.....	lxxv
Potassii bromidi.....	3 iij
Elix. aurantii.....	f 3 j

Misce ft. solutio.

Sig. Exhibe cochleare med. ex aqua cum nocturna vigilia premitur.

9. Ferri et ammon. cit.....	gr. lxxii
Tinct. nucis vom.....	f 3 iij
Sodii bicarbonatis.....	3 j
Syrupi simp.....	f 3 j
Aquam ad.....	f 3 vj

Misce et ft. mist.

Sig. Cochl. med. t. i. d. p. c. sum.

10. (a) Write dispensing notes on combinations of pepsin and bismuth in liquid mixtures.

(b) Cite two instances where a dispenser would be wholly justified in substitution.

THEORETICAL CHEMISTRY.

1. Define the laws illustrated by the compounds of sulphur and chlorine which have the following percentage composition:

Sulphur 47.40%, 31.13%, 18.44%.
Chlorine 52.51%, 68.87%, 81.56%.

Give other illustrations of these laws.

2. Explain and illustrate the statement, that chromium forms three series of compounds resembling those of magnesium, aluminium, and sulphur respectively.

3. Describe methods of preparation of: iodine, nitric acid, mercurous chloride, and sodium bicarbonate.

Give the physical and chemical properties, and the uses of these bodies.

4. Give an account of the preparation and properties of the principal hydrides.

5. Mendelëff in his classification of the elements places oxygen, sulphur, selenium, and tellurium in the same group of elements. Assign reasons for this classification.

6. Write a short account of the chemistry of copper, or of arsenic.

7. Show how the empirical formula, the molecular formula, and the structural formula of acetic acid can be determined. Upon what assumptions are structural formulae based?

8. Write equations illustrating the preparation of: ethane, butyl alcohols, propionic acid, oxalic acid, glycol, and aniline.

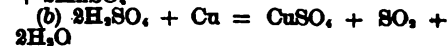
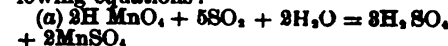
9. Compare the reactions of alcohol with those of phenol.

10. Give a brief account of the amines and amides or of the mercaptans.

PRACTICAL CHEMISTRY.

EQUATIONS.

1. Explain fully the meaning of the following equations:



2. "The hydrates of tin have both acid and basic properties." Give equations for chemical reactions which illustrate this statement.

3. Write equations of methods for the separation of:

(a) Arsenic from mercury.

(b) Copper from cadmium.

(c) Aluminium from chromium.

(d) Zinc from manganese.

(e) Barium from magnesium.

4. A solution is known to contain a lead, a silver or a mercurous salt. How, would you determine which of these it contains?

5. Illustrate by equations the reactions of:

(a) Hot sulphuric acid with metallic silver.

(b) Lead sulphide with nitric acid.

(c) Stannous chloride (in excess) with mercuric chloride in solution.

(d) Copper sulphate with potassium ferrocyanide in solution.

(e) Arsine (AsH_3) with silver nitrate in solution.

(f) Ammonium sulphide with ammonium chloride in solution.

(g) Ferrous sulphate with potassium permanganate and sulphuric acid in solution.

(h) Alcohol with potassium bichromate and hydrochloric acid in solution.

6. One gramme of a copper ore, when dissolved, is precipitated by hydrogen sulphide, and the precipitate, cupric sulphide, is found to weigh one gramme. Find the percentage of copper in the ore, and the volume of hydrogen sulphide, measured at 17°C and 770^{mm} Bar., required for the precipitation of the copper in 10 grammes of such ore.

MATERIA MEDICA, ETC.

1. Give source, natural order, habitat, chief constituent and medicinal use of *adepe lane hydrosus*, *hydrastis rhizoma*, *jaborandi*, *cascara sagrada*, *senna*, *ecballii fructus*, *santonica*, *manna*, *digitalis folia* and *galla*.

2. Give mode of preparation of camphor.

3. Describe gentian and cloves.

4. Give at least one distinguishing mark of each of these leaves: *matico*, *coca*, *jaborandi*.

5. Name preparations and doses of *Scilla*.

6. Give drugs and botanical sources from which the following principles are obtained:

Emodin, eserine, cathartic acid, emetine, beberine, pelosine, arbutin, sparteine, bassorin, saponin.

7. Give a very brief account of the considerations governing dosage in any given patient.

8. Mention chief channels of elimination of drugs from body.

BOTANY.

1. Describe the minute structure of a typical leaf, and give the principal structural modifications of leaves.

2. Give the histological structure of a typical vegetable cell, with the principal points in its development and reproduction.

3. What are the special characters of the natural orders, leguminosae, liliaceae and compositae?

4. Define the terms: (a) species, (b) fruit, (c) pollination, (d) phyllotaxy, (e) root.

Write short descriptive notes on: (a) styles, (b) stomata, (c) fibrovascular bundles.

5. Saprophytic and parasitic plants. Define, give examples of each, and describe their peculiarities.

6. Fertilization. Define and describe how brought about, with the various means which help "cross fertilization."

7. Give an account of respiration as it exists in the vegetable kingdom.

Student's Column.

Organic Materia Medica of the U. S. P.

[Continued from Page 71.]

Chimaphila. *Chimaphila*; *Pipsissewa*; *Prince's pine*; *Wintergreen*.

BOTANICAL NAME.....*Chimaphila umbellata*.
NATURAL ORDER.....*Ericaceae*.
HABITAT.....North America; Northern Asia, and Northern and Central Europe.
CONSTITUENTS.....Tannin; *chimaphilin*; arbutin ($C_{12}H_{16}O_{11}$) cryst silky needles.
PROPERTIES.....Externally—counter irritant and vesicant; internally—tonic, astringent, diuretic.
PARTS USED.....The leaves.
Dose—Ext. fld. Cc 4.

Chirata. *Chiretta*.

BOTANICAL NAME.....*Swertia Chirata*.
NATURAL ORDER.....*Gentianeae*.
HABITAT.....Northern India.
CONSTITUENTS.....*Chirettin*, $C_{27}H_{44}O_{12}$; bitter principle, ophelic acid, $C_{27}H_{44}O_{12}$; syrupy bitter substance, gentian-like odor.
PROPERTIES.....Bitter tonic, like gentian; not incompatible with ferric salts.
PARTS USED.....The entire plant.
Dose—Ext. fld. Cc. 1—1.30; Tinct. Cc. 2—8.

Chondrus. Irish moss; carrageen;

BOTANICAL NAME.....*Chondrus crispus* and *G. gartiana mamilliosa*.
NATURAL ORDER.....Class—*Algae*.
HABITAT.....American and European shores of Atlantic Ocean.
CONSTITUENTS.....Mucilage; halogen salts; traces of iodine and bromine.
PROPERTIES.....Demulcent, nutritive.
PARTS USED.....The fronds.
Dose—Decoction (1 in 120) ad lib.

Cimifuga. *Cimifuga*; black snakeroot; black cohosh.

BOTANICAL NAME.....*Cimicifuga racemosa*.
NATURAL ORDER.....*Ranunculaceae*.
HABITAT.....Woodlands of the United States and Canada.
CONSTITUENTS.....Neutral crystalline principle; starch and resin.
PROPERTIES.....Anodyne, sedative, alterative, in rheumatism.
PARTS USED.....The rhizome and roots.
Dose—Ext. Gm. 0.1—0.30; Ext. fld. Cc. 2—4; Tinct. Cc. 4—12.

Cinchona. *Cinchona*; Peruvian bark.

BOTANICAL NAME.....*Cinchona calisaya*, *cinchona officinalis*, etc.
NATURAL ORDER.....*Rubiaceae*.
HABITAT.....South America, from 10° north latitude to 19° or probably 22° south latitude.
CONSTITUENTS.....Astringent and alkaloidal principles, chief of which latter are: quinine, cinchonine, quinidine, cinchonidine.
PROPERTIES.....Tonic and febrifuge.
PARTS USED.....The bark.
Dose—Ext. Gm. 0.60—2.00; Ext. fld. Cc. 2; Inf. Cc. 30—60; Tinct. Cc. 4—8.

Cinnamomum Cassia. *Cassia cinnamom*; *Cinnamon*; *cassia bark*.

BOTANICAL NAME.....*Cinnamomum* (species undetermined).
NATURAL ORDER.....*Lauraceae*.
HABITAT.....China and Java.
CONSTITUENTS.....Volatile oil; tannin, sugar, starch.
PROPERTIES.....Aromatic stimulant.
PARTS USED.....The bark of the shoots.
Dose—Oil Cc. 0.30—1.00; Ingredient in tinct. cardam. Co.; Tinct catechu comp.; Tinct. lavand. Co.

Cinnamomum Saigonicum. *Saigon cinnamon*.

BOTANICAL NAME.....*Cinnamomum* (species undetermined).
NATURAL ORDER.....*Lauraceae*.
HABITAT.....China.
CONSTITUENTS.....Volatile oil.
PROPERTIES.....Aromatic stimulant.
PARTS USED.....The bark.
Dose—Oil. Cc. 0.30—0.10.

Cinnamomum Zeylanicum. *Ceylon cinnamon*.

BOTANICAL NAME.....*Cinnamomum zeylanicum*.
NATURAL ORDER.....*Lauraceae*.
HABITAT.....Island of Ceylon.
CONSTITUENTS.....Volatile oil.
PROPERTIES.....Aromatic stimulant.
PARTS USED.....The inner bark of the shoots.
Dose—Oil. Cc. 0.30—0.10; Tinct. Cc. 2—8. Ingredient in pulvis aromaticus.

Coca. *Coca*; *erythroxylon*.

BOTANICAL NAME.....*Erythroxylon coca*.
NATURAL ORDER.....*Liliaceae*.
HABITAT.....Peru and Bolivia.
CONSTITUENTS.....Coco-tannic acid; cocaine ethyle-cocaine; benzoyl-cocaine; cocaine homo-cocaine; benzoyl-pseudo-tropine; hygrine.
PROPERTIES.....Stimulant diaphoretic.
PARTS USED.....The leaves.
Dose—Ext. fld. Cc. 1—4.

Coccus. *Cochineal*.

ZOOLOG. NAME.....*Coccus cacti*.
ORDER.....Hemiptera—Class, Insecta.
HABITAT.....Mexico and Central America.
PROPERTIES.....Used as a coloring agent.
PARTS USED.....The dried female insect.

Colchici Radix. *Colchicum root*; meadow saffron.

BOTANICAL NAME.....*Colchicum autumnale*.
NATURAL ORDER.....*Liliaceae*.
HABITAT.....England, Messina and Colchia, from which place it derives its name.
CONSTITUENTS.....Colchicine; colchicine.
PROPERTIES.....Diuretic, sedative, purgative, and anti-podagric.
PARTS USED.....The fresh and dried corne.
Dose—Ext. Gm. 0.01—0.03; Ext. fld. Cc. 0.10—0.50.

Colchici Semen. *Colchicum seed*.

BOTANICAL NAME.....*Colchicum autumnale*.
NATURAL ORDER.....*Liliaceae*.
HABITAT.....England, Messina and Colchia.
CONSTITUENTS.....Colchicine and Colchicine.
PROPERTIES.....Diuretic, sedative and anti-podagric.
PARTS USED.....The ripe seeds.
Dose—Ext. fld. Cc. 0.10—0.30; Tinct. Cc. 0.60—1.00; Vin. Cc. 2—4.

Coriandrum. *Coriander*.

BOTANICAL NAME.....*Coriandrum sativum*.
NATURAL ORDER.....*Umbelliferae*.
HABITAT.....China, Southern Europe.
CONSTITUENTS.....Volatile oil; fatty matter malic and traces of tannic acids.
PROPERTIES.....Aromatic stimulant.
PARTS USED.....The fruit.
Dose—Ingredients in *Conf. Sennae*.

Crocus. *Saffron*.

BOTANICAL NAME.....*Crocus sativus*.
NATURAL ORDER.....*Iridaceae*.
HABITAT.....Oriental countries, probably from Greece and Asia Minor eastward to Persia; cult. in Spain, France, and Italy.
CONSTITUENTS.....Volatile oil; color-matter.
PROPERTIES.....Stimulant aromatic; chiefly used as a coloring agent.
PARTS USED.....The stigmas.
Dose—Tinct. Cc. 4—8.

Cubeba. *Cubeb*.

BOTANICAL NAME.....*Piper cubeba*.
NATURAL ORDER.....*Piperaceae*.
HABITAT.....Java.
CONSTITUENTS.....Volatile oil; resin and cubebic acid.
PROPERTIES.....Local irritant; mucous sedative.
PARTS USED.....The unripe fruit.
Dose—Ext. fld. Cc. 0.60—2.00; Oleoresin Cc. 0.30—2.00; Tinct. Cc. 2—8.

Cusso. *Kousso*; *brayera*.

BOTANICAL NAME.....*Hagenia abyssinica*.
NATURAL ORDER.....*Rosaceae*.
HABITAT.....Northeastern Abyssinia.
CONSTITUENTS.....Acrid resin, tannin.
PROPERTIES.....Tenuifuge.
PARTS USED.....The female inflorescence.
Dose—Ext. fld. Cc. 4—12.

Cypripedium. *Cypripedium*; ladies' slipper.

BOTANICAL NAME.....*Cypripedium pubescens* and *Cyp. parviflorum*.
NATURAL ORDER.....*Orchidaceae*.
HABITAT.....North America.
CONSTITUENTS.....Volatile oil, resin and starch.
PROPERTIES.....Nervine, antispasmodic.
PARTS USED.....The rhizome and roots.
Dose—Ext. fld. Cc. 0.60—1.30.

Colocynthis. *Colocynth*; bitter apple.

BOTANICAL NAME.....*Citrullus Colocynthis*.
NATURAL ORDER.....*Cucurbitaceae*.
HABITAT.....Japan, India, Egypt, Mogador, Cape of Good Hope, Turkey, and Grecian Archipelago.
CONSTITUENTS.....Glucoside and glucoside deriv.—*Colocynthin*; *colocynthin*, *colocynthin*.
PARTS USED.....The fruit.
Dose—Ext. Gm. 0.03—0.3. Powd. Gm. 0.10—0.30 as laxative; Gm. 0.30—0.6 as purgative.

Conium. *Conium*; hemlock; poison or spotted hemlock.

BOTANICAL NAME.....*Conium maculatum*.
NATURAL ORDER.....*Umbelliferae*.
HABITAT.....Asia, Europe and North Africa; naturalized in some portions of New England and New York and in South America.
CONSTITUENTS.....Volatile alkaloid—conium; conhydrine; pseudo-conhydrine; methylconium; ethyl-piperidine.
PROPERTIES.....Anodyne, sedative, narcotic.

PARTS USED.....The full-grown fruit, gathered while yet green.
Dose—Ext. Gm. 0.10—0.30; fld. ext. Cc. 0.10—0.40.

Convallaria. *Convallaria*; lily of the valley.

BOTANICAL NAME.....*Convallaria majalis*.
NATURAL ORDER.....*Liliaceae*.
HABITAT.....Europe, Northern Asia, Alleghany Mountains of the United States from Virginia southward.
CONSTITUENTS.....Glucosides; *Convallamarin* and *convallarin*.
PROPERTIES.....Diuretic and heart tonic.
PARTS USED.....The rhizome and roots.
Dose—Ext fld.—Cc. 0.18—0.60.

Copaiba. *Copaiba*; balsam copaiba.

BOTANICAL NAME.....*Copaiba Langsdorffii* and other species.
NATURAL ORDER.....*Leguminosae*.
HABITAT.....Tropical part of South America—Para and Maranhão.
CONSTITUENTS.....Volatile oil; bitter resin containing copaivic acid.
PROPERTIES.....Mucous stimulant in gonorrhoea.
PARTS USED.....The oleoresin.
Dose—Bals. Cc. 1—4; Mass Gm. 1—2.

(To be continued.)



(Written for the
American Druggist and Pharmaceutical Record.)

SHOW WINDOW ADVERTISING.

By A. R. ELLIOT.
New York City.

Window decoration for advertising purposes has of late years been carried to such a degree of perfection that it may be justly regarded as an art in which the highest success is attained by those who are endowed with the instincts and talents of true artists.

If your store has not the best of show window arrangements in it to-day, order them changed before closing to night, because you are losing valuable time in taking advantage of one of the best advertising mediums at your command.

If your whole front is occupied with doors, if your windows are too high for a good exterior view, if divided up into more than one large pane of glass, or not deep enough for a fine display of your most attractive goods, they are wrongly constructed and should be changed at once.

Employ, as far as possible, such material as the window is intended to advertise.

The designer must study the shape and size of the window to be decorated, so that the picture he is to produce will fit the frame. Have the top of the window as attractive as the sides and bottom and allow in the completed work no sign of tack or pin or board to be visible.

The display may not be merchandise as an occasional attraction. A coop of chickens will often set a whole town talking, but do not let the chicken-display occupy the window to the exclusion of your class of merchandise.

Give the coop and its occupants one half of the window. Divide the window, and on the other side, have a fine display of just one line at a time of your best goods. Toilet articles and perfumes. A line of remedies of your own make, perhaps, or nothing but brushes. A few marked in plain figures, at a low price.

A figure of St. Nicholas is good at holiday time, but let his presents be in the drug store line. Represent a rainy day or a snow storm, but let the goods be remedies for colds, rheumatism etc.

I believe thoroughly in this: That it is best to make the window display entirely of one article or line of goods, at a time. This avoids a confusion of ideas and gives the beholder just one idea at a time to carry home with him. A well-known merchant once said to me: "I have found that a window which contains a large number of copies of one book always creates a good sale for that book, when a really handsome display of many different books will not result in a single sale.

The window when finished, must be novel to attract attention, beautiful to excite admiration, artistic to satisfy the critical and appropriate to accomplish its purpose—to attract attention and influence trade.

Keep your windows clean if you die in the attempt.

The least expensive form of advertising—the window display—is growing in favor with the drug trade, though not so

And lastly and always, I want to say this:

Advertise,
Advertise persistently,
Advertise intelligently,
Advertise judiciously.

"Toot your horn if you don't sell a clam."

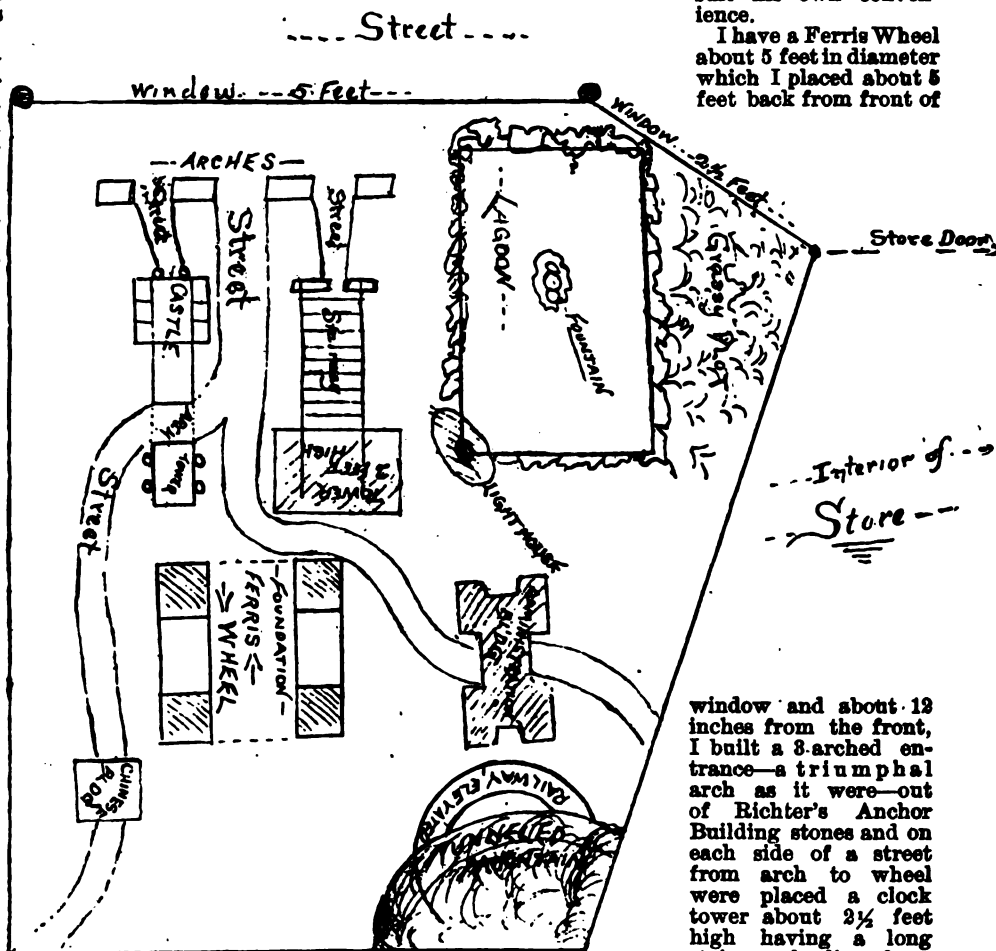
A SAMPLE SHOW WINDOW.

By A. J. EMBREE.
Belton, Texas.

Herewith I present directions for making a show window display like one that I have had open to public view for the past month. I think that displays as a general thing, should be changed weekly, but when an expensive production, as well as elaborate, is given the people, I believe it will bear a month or so with them or perhaps even longer.

I made a platform just as high as bottom of window-floor and extend back about 8 feet; I take for granted that all windows are the same size and shape as mine, in the event they are not, the reader can arrange space to suit his own convenience.

I have a Ferris Wheel about 5 feet in diameter which I placed about 5 feet back from front of



SUGGESTION FOR SHOW WINDOW BY A. J. EMBREE.

rapidly as it ought to, and there is yet much to be desired in the arrangement of the contents of many apothecaries' windows, lack of skill being responsible for poor results even when the material is abundant. Periodical visits to the large cities and an examination of the window displays of the leading stores would furnish country dealers with many suggestions regarding the arrangement of the contents of their show window.

like building connected by an archway to a smaller building; these were erected with the same stones; in the rear of Ferris Wheel I have a Chinese-looking building made of painted wood and paper, while at side of clock tower there is a lagoon, from whose center, shoots up a two-foot stream of sparkling water which patters upon the gamboling fish as it reaches its destination below, and which finds its upward journey through a central grotto. In the vicinity

of the lagoon is an exact miniature reproduction in paper of the Administration Building at the Chicago Fair, while just to its rear is a circular elevated railway whose circular journey carries it through a tunnel under a small hill. I sprinkled sand all over the floor about one-half inch deep, and took white sand or flour and made the streets as in accompanying sketch. I made the covering with blue cloth or tissue paper placed in a spherical shape, and put in the moon and stars by cutting holes in the covering and cover with some colored cheese cloth and was ready to raise the window curtain and introduce "Midway Plaisance" to the public gaze.

The Ferris Wheel is run by a small dynamo with string band attached and out of view. I use a small blue string and it is quite amusing sometimes to see

people endeavoring to find out what runs the wheel as the string is so small and almost invisible from the street and dynamo is entirely out of view. I have mirrors about 5 feet high extending entirely around the display which gives it a decidedly dazzling effect. The fountain is fed from a water pipe or a syphon, if water from city water works is not obtainable. I, of course, make no claim of "Midway" accurately reproduced, I only put the display in the window to attract attention and it very effectually does that. An exceedingly pleasing effect is produced by sprinkling diamond dust all over the ground; the small tunneled hill is made from cotton seed hulls sprinkled with flour and sand with a little diamond dust here and there. At night, this display is strikingly attractive.



NEW YORK.

Earl Parker of Angola has opened a drug store at Buffalo.

Wm. H. Wickham, of McKesson & Robbins sailed for Europe on July 25.

Burglars looted C. F. Broom's drug store at Cortland recently, to the extent of \$1.25 in cash.

W. S. Thompson, of the Crown Perfumery Company, London and New York, sailed for Europe last month.

Engelhard & Huber have sold their store at 116th street and Third Avenue to the son of a local physician.

Another of Whitall, Tatum & Co.'s salesmen, Wm. P. M. De Camp, is sojourning in the mountains of Virginia.

The Governor of New York has re-appointed E. S. Dawson, Jr., to succeed himself on the State Board of Pharmacy.

Jos. Hall, formerly of Priests' Pharmacy, Seventh avenue and 23d street, is now with Reeder Brothers, Fourth avenue and 31st street.

R. T. Tanner, who represents Sharp & Dohme in the New England States, is at present in Vermont where he reports business good.

The premises of C. N. Crittenton at 52 Fulton street, were also visited by fire on Sunday and damaged about \$1,000 principally by water.

The bashful tourist, L. E. Treat, of Johnson & Johnson passed through New York last week on his way to his summer retreat at Elsworth, Me.

Wm. Jos. Beck, the popular salesman for Whitall, Tatum & Co. in Canada, sailed for his home in Liverpool on the "Campania" last Saturday.

Ira I. Hopkins, N. Y. C. P., '98, recently with Geo. E. Tappendin at Columbus avenue and Sixty-fourth street, is acting as head clerk at Warren's Amsterdam avenue store.

Edward W. Sluyter a druggist of Herkimer is a most accomplished and enthusiastic bicyclist who thinks nothing of the hills around Richfield Springs.

F. W. Cassabeer's pharmacy at Seventy-second street and Eighth avenue has been fitted with a very handsome new soda fountain by Chas. Lippincott & Co.

Charles L. Hupfell of Montclair, N. J., the druggist charged with selling whiskey to be drank on his premises, pleaded guilty and was fined \$20, which was paid.

H. L. Emerson, with Theo. Metcalf & Co., Back Bay store, passed through New York City recently, spending a few days here preparatory to going to his old home in Marlboro, N. H.

There was a slight fire in Spotten's drug store, corner of Fulton and Fourth streets, Troy, caused by some one carelessly throwing a lighted match on the netting covering the soda water fountain. The damage was trifling.

Grace E. Wilcox & Co., is the firm name of the new proprietors of the Palace drug store in Orlean, N. Y. Miss Wilcox, who was a student of Salamanca, is a graduate of Buffalo college of Pharmacy and is an attractive young lady.

B. F. Warren has opened a very attractive store at Amsterdam avenue and Seventy-ninth street. The store is one of the handsomest designs yet gotten out by Bangs, of Boston, being finished in mahogany in the empire style.

At an assignee's sale one block of 2,314 shares of stock in the H. H. Warner Co., Limited, some fair bidding was done. Mr. Moffat, said to be Mr. Warner's attorney, succeeded in obtaining them for \$506. He also bought 400 more shares for \$363.

Charles Magnus Weisz returned from Fulton County on July 30. His friends are now accounting for his refusal to visit Saratoga, by the presence in that famous

resort, of so many democrats of the Tammany persuasion. Mr. Weisz is a man of firm convictions and one of them is that home industries should be protected.

John R. Hardin, receiver of the Crescent Drug Company, Newark, was ordered by Vice Chancellor Van Fleet on Thursday to pay Mrs. Bolles, one of the creditors, a claim of \$500 which he had disallowed. The daily papers said Mr. Hardin had been ordered to pay Mrs. Bolles \$7,500, and the numerous creditors who were not aware of this extra \$7,000 indebtedness, have kept Mr. Hardin busy explaining that the statement was exaggerated.

Stallman & Fulton, importers and exporters of crude and prepared drugs, 10 Gold street, New York City, have issued a neat compilation of tables of weights and measures of original packages of drugs, etc. The book also contains a description of the official tares as adopted by the drug section of the New York Board of Trade and Transportation. The tables will be found useful for ready reference and as no charge is made for the work its circulation should be wide.

James A. Webb, a New York manufacturer, has purchased the Madison (N. J.) *Eagle* for about \$3,000. The paper has been published for ten years as an independent journal. Mr. Webb is well known in Madison, having lived there for many years. Much interest is manifested in the sale, as Mr. Webb is a staunch Republican and Madison is largely Democratic. He has stated that his object was to prevent the paper from falling into the hands of some one who might use it to the detriment of the borough.

J. N. Hegeman & Co. (incorporated) are adding to the number of their branch stores. The latest addition is the old established pharmacy of Thomas Brimelow at Thirty-first street and Third avenue. The store has been conducted for the past few years by Mr. Brimelow with the consent of the Board of Pharmacy. Mr. Brimelow is reported to be of unsound mind by some, and to have passed away from this earth by others. To the public his whereabouts have been a good deal of mystery since he gave up attending the store some years ago.

The revival of the "blue laws" in Milburn, N. J., which began with the closing of two fruit stores conducted by Italians on Sunday, has terminated in the closing of every business in the town except the pharmacy, newsdealers', and milkmen's. The three named are exempt from the law. When the enforcement of the law was commenced on May 26, the township committee allowed the meat markets and barber shops to continue business. A week later, meat markets were closed at 8 A.M. on Sundays, and last week two butchers and a barber were fined for conducting business.

Mrs. Jacob Abrams and Miss Callie Onderbrook of Nyack were dangerously poisoned at Hackensack on July 28th. Mrs. Abrams went to C. H. Smith's drug store in the morning for extract of dandelion. After taking the supposed drug the two women became unconscious. A physician was called in, and at 7.30 P.M. succeeded in reviving Miss Onderdonk. Mrs. Abrams did not regain consciousness until nearly two hours later. Both are recovering slowly. Dr. Dingman thinks the poison might have been Indian hemp, from its effects. The jar from which it was taken was received from New York, plainly labeled "Extract of dandelion."

The building occupied by Fairchild Bros. & Foster at Fulton and Gold streets this city was on Sunday July 29, seriously damaged by fire for the third time in its history. The damage to stock and fixtures was so great as to cause a complete suspension of business at the offices in the burned building, but the firm have secured a temporary office in room 107, Downing Building, 106 Fulton street and orders will be filled from that address. It is the intention of Fairchild Bros. & Foster to erect a new fire-proof building as soon as satisfactory arrangements can be made. Fairchild Bros. & Foster estimate their loss at between two and three thousand dollars.

Prof. Fred. J. Wulling, Dean of the College of Pharmacy of the University of Minnesota, is back from his recent tour in Europe, and is spending a few days at the home of his parents in Carlstadt, N. J. While abroad Dean Wulling made good use of his opportunities to study the workings of the pharmaceutical institutions of the countries visited. In Scotland, he attended a meeting of the Edinburgh branch of the Pharmaceutical Society, and he speaks in grateful terms of the many courtesies extended to him by Scotch pharmacists. He returns to Minneapolis with his ideas of the value of higher education for pharmacists enhanced; and the added enthusiasm which he will undoubtedly bring to bear on his future work in his department will redound to the benefit of the students.

After an illness of about seven weeks, Carl A. Mertz, one of the best known German-Americans in the Eastern District of Brooklyn, died at his home, 843 Lafayette avenue, on July 28. He was born at Hanau, Germany, April 2, 1837, and came to this country when about nineteen years of age. Until eight years ago he conducted the hotel at 16 Broadway, which for a number of years was one of the principle rendezvous of men prominent among the Germans. In August, 1865, Mr. Mertz was one of the founders of the Arion Singing Society, the others surviving him being Louis Adelstein, Carl Vogt and Isaac Engels. The deceased was also an Odd Fellow and an honorary member of the Williamsburg Saengerbund. He leaves a widow, two sons and four daughters, one of the latter the wife of Druggist Speh, of Broadway and Ditmars street.

A number of East side physicians have incorporated the "Physicians' Pharmaceutical Company" to supply medicines at a reduced cost to poor patients. The Company's purpose (like that of the Free Dispensaries!) is not commercial, it is stated. O no! It is to be satisfied with owning and managing drug stores and seeing that patients obtain pure drugs and have their prescriptions carefully compounded! The commercial spirit has already entered into the matter to the dissatisfaction of several of the incorporators, who since the above was written have signified their disapproval by withdrawal. Among these are Dr. W. Dorpman, of No. 124 Rivington street, and Dr. Leo Sandberg, of No. 106 Rivington street. The latter, who was originally the President of the company, stated that, recognizing the enterprise had become purely a business one, he had severed all connection with it.

Bella Warner, wife of Louis Henry Warner, a Chicago druggist, appeared before the Supreme court in this city in an endeavor to obtain the custody of her child. Some years ago Mrs. Warner secured a divorce from her first husband, Frank Rooney. Prior to obtaining the divorce,

Mrs. Warner gave the boy into the custody of Mrs. Julia Egan, of Bensonhurst. Mrs. Egan refuses to give the boy up, and so Mr. and Mrs. Warner came on from Chicago to invoke the law in their behalf. Mrs. Warner says in her petition that while she was in poor circumstances she placed the child temporarily in the care of Mrs. Egan, without, however, intending to give him up permanently. Now she is able to care for him and wants him back. Mrs. Egan, who is a wealthy woman and childless, tells a different story. She says the boy came to her house seven years ago, apparently without a home, and that she has since educated, fed and clothed him.

The legislature has passed and the Governor signed the bill establishing a Colony for Epileptics in New York State. The Colony is named after the late Oscar Craig, president for some years of the State Board of Charities. The bill provides for the purchase of a tract of 1875 acres of beautiful land in the Genesee Valley, near Mount Morris, in Livingston County. The law requires that all buildings put up should be on the village plan. A Board of five Managers is provided for, and the following have been appointed: Dr. Frederick Peterson, of 201 West 54th street, New York; Mrs. C. F. Wadsworth, of Genesee; Geo. M. Shull, of Mount Morris; Dr. Chas. E. Jones, a homoeopath, of Albany, and W. H. Cuddeback, of Buffalo. At their organization in Albany, on the 8d of May, the Board of Managers made Dr. Fred. Peterson, of New York, president, and Geo. M. Shull, of Mount Morris, N. Y., secretary, of the Board. Dr. Peterson, who has written so much on epilepsy, is well qualified for the position to which he has been elected.

Colonel Brent Good, says the *Press*, has just returned from Europe—that is to say, he has completed his sixty-eighth round trip. The Colonel had the privilege of escorting down to the cottage of Mrs. Good, at Monmouth Beach, the niece of Sir John Macdonald of Canada, who is to be the guest of Mrs. Good until the 1st of September, and then he came back and joined Mr. James Breslin, and the two went off on a fishing trip to the Thousand Islands, where the salmon are biting briskly, on moonlight nights. There never, surely, was a man who got more out of life than the Colonel. He organizes existence into a dovetailed series of enjoyments. He is an epicure among travelers, but not a traveler among epicures. He bends his mind and conforms his body to the pursuit of happiness every hour of the day and every day of the year. Notwithstanding this habit of his, he remains a shrewd and tireless man of business. Like most of us, he has to work for every dollar he spends, but somehow he contrives to enjoy even the hardest labors of moneymaking.

Wilson Soule, one of Rochester's millionaires, was killed on July 25th in a runaway accident in that city. Mr. Soule drove up to the Rochester Club, his companions alighted and went into the building. He called for a servant to hold the horses, but tiring of the delay sprang from the carriage and stood at the horses' heads. Just then a horseback rider came down the avenue and Soule's horses took fright. He attempted to get into the carriage, keeping hold of the lines, but became tangled in the reins. The frightened horses dashed up the avenue a short distance, dragging Mr. Soule along the brick pavement. He was soon thrown over upon the stone sidewalk and was dead when help reached him. His skull was fractured. Wilson Soule was born in

Wayne County, N. Y., in 1853, and was the son of Asa T. Soule, who died on January 17, 1890, worth several millions. The young man was educated at the schools of Wayne County, and in 1873 engaged in business with his father, who had just started the Hop Bitters Manufacturing Company of Rochester, a patent medicine concern that did a large business for years but has now been wound up. With the profits of the business the father made large investments in the West, especially in Kansas, where he at one time controlled an entire county. Since his father's death Wilson Soule had given his entire attention to the business of the estate, managing banks, irrigating canals, railroads and real estate investments. He was a married man and had but lately built one of the handsomest residences in the city. He was never prominent outside of business circles, but gave liberally to local charities and was a popular citizen.

New York State Association Delegates.

President Fish has amended the list of delegates given in our last issue as follows:

American Association: R. G. Eccles, M.D., Brooklyn, chairman.

Connecticut Association: Chas. Cook, Jr., Troy; E. A. Harvey, Camden; Geo. E. Burrows, Chatham, chairman.

Massachusetts Association: W. E. Baldwin, Glen Falls, chairman; John E. Grady, Green Island; S. W. Toby, Hudson.

New Jersey Association: Geo. Kempton, New York City; Thos. J. Macmahon, New York City; Geo. B. Wray, Yonkers.

N. W. D. A.: W. G. Rogers, Middletown, chairman; Martin McIntyre, Fonda; C. H. Butler, Oswego; J. H. Hutchins, New York.

Pennsylvania Phar. Association: A. H. Mason, New York, chairman; W. W. Tooker, Sag Harbor; Geo. A. Hopkins, Trumansbury.

The Wail of a Drug Store Cashier.

"The work of cashier in a drug store," said a young woman who follows that occupation, "ought to be worth much more money than that of cashier in any other store."

"Why is that?" asked the person to whom she made the remark.

"Because," she said, "it is so much more disagreeable. Just look at my hands. They are not fit to be seen, and feel as though the fingers were all glued together. That's all due to soda checks. They are always wet and sticky. The boys who draw the soda have sticky fingers when they hand them to the customers and the fingers of the latter are wet when they receive them."

The result is that they are all gummy when they come to me. I suppose I wash my hands twenty times a day, and yet they never feel comfortable. I scrub them for about fifteen minutes when I get through with my work, but the stickiness seems to be sunk in, and somehow I can't get rid of it."

MASSACHUSETTS.

Boston, Aug. 5.—They do say that over in Cambridge the "blue laws" are feeling rather blue. It all came about in this way. As predicted in my last letter, the druggists, after being closed for two Sundays, decided to keep open and give the police an opportunity of testing the matter in court. Druggist Reyeroft, who runs two stores in Cambridge, was the first to express an intention of testing the law, and it was at one time thought that he would be the only one to keep open, but through a disagreement as to the payment of the cost of defence between himself and the members of his association, and a desire on the part of the other members to keep open also, this part of the programme was abandoned. So it came to pass that every store in the city was open for business. In some stores, it is true, only those articles allowed to be sold by law were dealt in; at other places regular customers only were accommodated with prohibited goods, while in the remaining establishments everything formerly dealt in upon the Sabbath was for sale.

THE SUNDAY LAWS.

One druggist had a sign up on his cigar case bearing the words: "No cigars or soda to-day." On the marble counter in front of his soda fountain was a large pitcher of ice water, holding up the sign, "Free Ice Water."

One North Cambridge druggist did business in soda and cigars, but the police did not "see" him, and no complaint was made against him. He had a sign on his counter which plainly told that certain articles could only be had for medicinal purposes.

At Reyeroft's store also signs were posted up informing the public that when they bought soda and cigars they did it for medicinal purposes. Each customer was asked "if he wanted it as a medicine," and many a smile was exchanged in that store over the question.

A TEST CASE.

The police selected the stores of Messrs. Reyeroft and Bartlett for test cases. At the former's store, evidence of the sale of a ginger soda, a cigar, and some horehound candy was obtained, while at Bartlett's an officer saw soda sold. On the following Monday morning the blue-coats repaired to the court house with their evidence, but while waiting for an audience with the judge, orders came from the Mayor not to prosecute. What did it all mean? The officers knew not, but they thought the decision in the ice cream case had much to do with the Mayor's change of attitude. And it had. The declination of the judge to grant a warrant in the above case, and a consultation with the city solicitor had accomplished all this. Here is how the Mayor subsequently defined his attitude upon this question:

My position in this matter of enforcing the laws relating to the Lord's day has been an entire willingness to enforce the law whatever it might be. As to what was the law, I took the advice of the city solicitor. It was assumed by the druggists, as I have understood, that it was my intention to complain of them for selling tobacco, as well as soda water and other drinks of a like character. It is for the courts to decide what they are, but I have always regarded these articles as drugs and medicines. Intending, however, to act in good faith, I notified the druggists and other people that I should enforce the law whatever it might be, for it was said that the druggists were selling toilet articles and articles not ordered by the prescription of a physician, and not medicinal appliances used by physicians and surgeons, that is, articles not excepted by the law of 1837.

The request of the ministers did not apply alone to druggists, but, in their own words, required the en-

forcement of any other statutes which aim at practices which are known and acknowledged to be violations of the law, or, to quote still further from their resolutions, they requested the enforcement of all laws which are designed to secure the keeping and sanctity of the Christian Sabbath.

Complaint was made against a person who delivered ice cream on Sunday, a case which, in the opinion of the city solicitor, was a clear violation of the Sunday law. The judge, however, refused to receive the complaint. It seems to me that under this ruling I cannot do anything further.

The sale of drugs and medicines is made lawful by express statute, and under the ruling of the court the delivery of ice cream, which most people consider a luxury, is made lawful. With this position of the court before me, it seems to me that it would be useless to make further complaints of acts which both the city solicitor and myself had supposed to be violations of the Sunday law.

As far as the druggists are concerned, it seems to me they acted hastily and without sufficient reason in closing their stores on Sunday. For, if they believed, as I understand some of them to have asserted, that the sale of tobacco, soda water, etc., was lawful, and certainly there is ground to believe that it is, they did a strange thing in closing their stores, and thereby putting people to great inconvenience.

The upshot of the whole matter is, it seems to me, that under the decision of Judge McDaniel there can practically be no violation of what is known as the Sunday law. For if the delivery of ice cream is lawful, it is hard to conceive of any kind of work on the Lord's day which convenience may require that is unlawful.

As a natural consequence, Sunday, July 29, saw all of the stores transacting business as was their former custom. Judge McDaniel was voted a popular man whether his decision was law or not. "Tis true there were disgruntled ones, the few ministers in town, and Dame Rumor has it that they may call another meeting in the fall and make another attempt to obtain a warrant when the regular judge, who is now on vacation, returns. Some have thought that the laugh was on the druggists, in view of the turn of affairs, but their position is clearly explained by one of their number as follows. "The idea has gained ground through several sources that the druggists were fighting the people. This is not so. We decided to close two Sundays, so that the people could get an idea of how we stood under the order. If we had opened that first Sunday for the sale of drugs and medicines only, people would have been coming in and wanting to buy the forbidden articles. Regular customers would not like to be refused, and if you sold to one you would have to to another. They would not have understood how we were situated, and it was thought that by closing up they would more easily get the idea of the matter."

NEWS NOTES.

Dr. H. L. Bowker and family are summing at Swampscott.

Boston will send a large delegation to the A. P. A. meeting.

Herbert Burke, Malden, is a recent purchaser of a Low Art Tile fountain.

H. H. Manning, Lowell, Mass., has bought a fountain from the Low Art Tile Company.

The Theodore Metcalf Co., have just issued an excellent engraving of the late Mr. Metcalf.

The new license commission of Lawrence is looking sharply after the druggists of that city.

P. J. Maguire of the J. W. Tufts Co., has recently been in New York city in the interest of his firm.

L. B. Sweet, Bath, Me., has been refitting with mahogany fixtures which he secured from Bangs.

C. H. Bangs is to furnish new fixtures for the new store which B. J. Owens is to open at Providence, R. I.

Nathaniel J. Rust, of the Rust-Richardson Drug Company, accompanied by his family, is spending the summer abroad.

L. P. Hubbard and S. D. Wardsworth, both of Plymouth, have just purchased fountains of the Low Art Tile Co.

Billy Shaughnessy, the "knight of the fountain" at Reyeroft's Cambridge pharmacy, is having an outing at Wolfboro, N. H.

George A. Loring, Wollaston, Mass., is the proprietor of a new store. He has quartered oak fixtures from Bangs' manufactory.

S. A. Barteaux has opened a new store on Blue Hill avenue, Dorchester; it is adorned with a large Low Art Tile fountain.

Alvan George, Jr., is to open a new store on Washington street, near Egleston square. C. H. Bangs has the contract for the fixtures.

E. Cornish, Topsham, Me., and E. E. Maeller, Grand avenue, New Haven, Conn., are recent purchasers of Low Art Tile fountains.

G. F. Gladding, proprietor of a store at Warren, R. I., is to open another at Providence, which he proposes to fit up with Bangs' fixtures.

The widely-known "Preston of New Hampshire" has opened a branch store at York Beach, Me., for the sale of his famous specialties.

Frank M. Frost formerly in business in Chelsea, has opened a new store at 405 Shawmut avenue. His fountain is of the Low Art Tile pattern.

A. Gilman Ferdinand is the new proprietor of the store 996 Washington street. He has greatly improved the appearance of their establishment.

Col. Benjamin S. Lovell, a member of the firm which manufactures the celebrated bicycles known as the "Lovell Diamonds," is a possible candidate for Governor of this State.

A Fall River chemist, Edward J. Bromberg, has been held in \$1,000 bonds for the grand jury on the charge of larceny of bottles of stock chemicals from E. P. Francis' laboratory.

Center Harbor, N. H., never boasted a drug store until this season, and its advent is hailed with delight by the patrons of the hotels. P. C. Lampry, of Lampry & Welle, Laconia, is the proprietor.

Samuel Smith, of Fall River, was thrown from a bicycle in front of a wagon recently, and the wheel of the latter passed over his head. His jaw was broken and head badly crushed, and it is believed his injuries will prove fatal.

A Cambridge paper contains the following:

"We have actually heard of one drug clerk who took occasion, through the recent Sunday closing, to attend church. We want to be fair and give the Sunday closing adherents all the credit that is due them."

Whipple and Mansfield, Salem, Mass., now own four stores. They have one in Lynn and have just opened the third in Salem, the mahogany fixtures for this latter establishment being furnished by C. H. Bangs.

The many friends and well-wishers of Ex-senator C. B. Emerson of Haverhill, will be pleased to learn that he is rapidly recovering from his recent severe sickness. He is summering at Squirrel Island, Maine, but makes frequent trips to Mass.

George W. Cobb, president of the New England Retail Druggists' League has opened a new store at Newton Centre, which is said to be one of the best in this state. It has a large eighteen-syrup onyx fountain which was manufactured by Lippincott.

Secretary Reeves of the Apothecaries' Guild is taking a well earned vacation up in the Granite State this month. It is possible that he may do some league work in that State in addition to what he has planned to accomplish in this line in Vermont.

One of the hobbies of Pharmacy Commissioner A. K. Tilden is that of orthography, and it has been his annual custom for many years to offer a series of prizes to the students of Bridgeton Academy (a school in which he is deeply interested), who attain the greatest proficiency in this branch.

Charles R. Garratt of Everett, kept his store open all day on July 29 and sold cigars and soda to his customers for the express purpose of testing the law. This he will have an opportunity to do, as he has just been summoned to court to answer to a charge of alleged illegal Sunday sales.

Frederic Olert, a Lowell nurse, has been sent to jail for a month for obtaining property by false pretences. A morphine user by hypodermic injections, and unable to get his favorite drug, he forged the prescriptions of physicians for morphine, and obtained the drug at two stores. A more miserable creature has seldom been seen in the police court.

Newburyport drug stores have been closed for many Sundays, and now it is said that an ice cream dealer of that city, in view of the Cambridge contest, proposes to defy the authorities. If so, it may help the druggists out of their dilemma. The Cambridge Press says: "Let us all join in the singing of that good old tune: 'Dare to be a McDaniel.'"

Mahogany fixtures seem to be the proper thing for drug stores just at this time, judging by the orders which are being placed for this style of fitting. C. H. Bangs has contracted to furnish fixtures of this material to A. M. Boney, Broadway and 88th street, New York City; James A. Hyatt & Co., Richmond, Ind.; John L. Vine, Norwood, Ohio; E. H. Nicholl, North Amherst, Ohio; Miss May Muller, Butler, Penn.; Fred Simon, Hoboken, N. J.; and W. T. Vredenburg, New Brighton, S. I. Mr. Bangs is also to furnish fixtures to B. F. Warren, N. Y. City, and A. J. Richards, Marietta, Ohio.

My druggist told me an uncheerful fact says the observant citizen in a Massachusetts paper as he squirted some fizz into my "orange phosphate." He had been reading in his trade paper, he said, analyses of several makes of acid phosphate in common use at soda fountains, and only one of these brands proved to be genuine phosphoric acid. One brand is made entirely of muriatic acid, and the others contain an admixture of that. While the effect of muriatic acid on the stomach is similar, my druggist says, to that of phosphoric acid, it has none of the bracing effect on the head and nerves attributed to the latter. It costs only 15 cents a pound, while phosphoric acid costs 60 cents. Fortunately, the original and popular brand of acid phosphate is genuine, and it is the imitators who adulterate, according to this druggist!!!

New Hampshire Commission of Pharmacy.

The fourth quarterly meeting of the New Hampshire Commission of Pharmacy was held in Manchester, Wednesday, July 25, when the following named candidates passed a successful examination: *Seniors*—Herman Pihlman, Manchester; Leon

E. Leavitt, Lebanon; Frank L. Wilson, Berlin. *Juniors*—Edward F. Lanergan, Nashua. The next quarterly meeting will be held in Manchester, Wednesday, October 24, 1894.

PENNSYLVANIA.

PHILADELPHIA, August 6.—The victory of the wholesale druggists of Cincinnati, and the secretary of the N. W. D. A. has caused M. N. Kline, chairman, of the Committee on Proprietary goods to issue a circular expressing his confidence in the maintenance of the rebate system.

MR. KLINE ON THE SITUATION.

In speaking of the decision of the Court Mr. Kline said: "As to the effect upon the contract system of the outcome of the Park suit, it may be well to go into a brief history of what led up to this suit.

John D. Park & Sons have, ever since the adoption of the Rebate system, refused to confine themselves in their sales to rebate prices. They did, at first clandestinely, and more recently, openly, sell below rebate prices. In addition to this they have always announced their willingness, and in fact eagerness, to sell goods to cutters at retail. Proprietors who were anxious to restrict their goods, and jobbers who were interested in having uniform prices maintained, refused to have any dealings with the Parks. The Proprietary Committee was authorized to keep a close watch upon the Parks' supplies, and report to the proprietors the names of the parties who furnished such supplies contrary to the proprietors' terms. In consequence of this, Park stock became seriously crippled, and the concern finally the latter part of April last brought suit against the jobbers in Cincinnati, Mr. Bower, the secretary of the proprietary committee, praying for an injunction against this action. The case coming to trial about the middle of July, the plaintiffs produced about all the evidence they could, and counsel for the defense admitted the action of the Proprietary Committee and the jobbers to have been just as stated above, claiming that the contracts were perfectly legal and that the action consequently of the committee representing the Association was legal also. The Court appears to have agreed with this view of the case, and this being manifest to Plaintiff's counsel, they finally decided to withdraw their case, and pay the costs, which they were permitted to do under the Ohio code.

Opinions have heretofore been furnished from eminent counsel to the Proprietary Committee affirming the legality of rebate contracts. This is the first instance when an opportunity has been presented, where the correctness of these opinions could be confirmed in an actual trial by any Court. The chief value of the result of this trial is to demonstrate the correctness of these opinions and consequently to give confidence to those proprietors who have heretofore doubted whether rebate terms could be enforced in spite of the Anti-Trust laws, National and State.

SHORTEN THE HOURS OF LABOR.

The question of giving the druggist more hours to himself has been under discussion for a long time but there seems no relief for the poor druggist. Even the laboring man has fixed hours but the man who is behind the counter in a drug store never finds his work done. A few days ago a well known druggist said: "For years past there has been a progressive tendency to lessen the hours of toil of the

business and laboring man, creating and taking advantage of every holiday. The Saturday half-holiday has become the universal custom and the benefit derived unquestionable. As usual the movement met with opposition and it was inferred the public could not adjust itself to such inconvenience. Yet time has fully justified the movement.

"Druggists, on the contrary, excepting a few, have been in such a state of lethargy and servitude they are unable to conform to modern ideas. The same principles have been so inculcated into the minds of drug clerks they submit without a word of remonstrance. It is surprising they have not sought a remedy. Their salary is not in proportion to hours of service now required or the responsibility. That is owing to a great extent to the unprincipled methods of cutting prices, necessitating the addition of all sorts of devices, until the original drug store, with few exceptions, has lost its identity altogether. But a general movement to curtail the hours of business would prove beneficial to all concerned; better service would be rendered and opportunities given for mental and physical improvement and no material loss, excepting an occasional glass of soda water, innumerable calls for stamps and the use of the directory.

"I would suggest the closing of all drug stores at 9 o'clock P.M. and Sunday from 1 to 6 P.M. Urgent needs could be accommodated by making use of the night-bell, some one being in constant attendance."

It is not presumed there will be a general stampede to adopt such measures, as the average druggist is nothing more than a convenience. He places little or no value upon his time, and the appreciating public agree with him, taking every advantage of his weakness. If such a system were adopted the public would adapt themselves to it as readily as they have to the Saturday holiday. It only remains with the druggist to remedy matters.

THE A. P. A. MEETING

The meeting of the American Pharmaceutical Association which is to be held at Asheville, N. C. will, in all probability be attended by all the professors of the Philadelphia College of Pharmacy. M. M. Kline, chairman of the committee on proprietary goods of the N. W. D. A. intended to go but he thinks now it will be impossible.

THE BOARD OF PHARMACY.

Thirty-one out of 107 candidates passed the State examination for registered pharmacists and qualified assistants at the examination held in Williamsport, July 14. Those who passed as registered pharmacists are: W. F. Pauley, Pittsburgh; W. K. Baker, Altoona; J. Anson Singer, Forty Fort; J. A. Hart, Philadelphia; W. G. Young, Pittsburgh; H. W. Heckel, Allegheny; M. P. Deitwiler, Phoenixville; M. A. Porter, Canton; Matthew Cramer, Old Forge; D. G. Jones, Taylor; J. H. Bailey, South Bethlehem; J. E. Chander, Kennets Square; George S. Hill, Syria; Thomas E. Peckman, Wayne; Wm. Schuman, Pittsburgh; E. J. Stephens, McKeesport and Andrew Campbell, Williamsport.

Qualified assistants: W. R. Anthony, Glen Anthony; J. P. Tonhill, Pittstown; C. M. Swenbank, Wilkesbarre; J. M. McKenna, Columbiana; J. R. Reinig, M. D., Philadelphia; P. H. Langer, Reading; F. Kline, Philadelphia; Geo. Young, Johnstown; Joseph W. Ahman, Williamsport; B. F. Drifnas, Reading; H. A. Bostock, Norristown; L. C. Gillette, Towanda; H. F. Marsden, Towanda; Charles L. Harding, Williamsport.

The date of the next meeting of the Board for the examination of applicants for registration to be held at Philadelphia and Pittsburgh, in October, has not yet been determined. All applicants for examination should apply to the Secretary, Charles P. George, 1808 N. Third street, Harrisburg, Pa., not later than October 1, for application blanks, and exact time and place of next meeting.

MERE MENTION.

A number of druggists are taking advantage of the dull season and are having their stores renovated and improved.

Some Philadelphia dispensers of soda water are worried because competitors insist on selling plain soda for three cents a glass. This is a little discouraging. It would seem that five cents is not too much for any glass of mineral water, even if syrups are not included. But as this is said to be an age of small things, such petty actions must be endured, along with others that help to make life pleasant for the retail druggist.

An explosion of gasoline caused a fire in the pharmacy of Harvey F. Hess at Bethlehem, Pa., and Mr. Hess was painfully burned in trying to smother the flames. Considerable damage was done to stock in the cellar of the store before the fire was extinguished by the local department.

J. Frank Kilgus, formerly with Hance Bros. & White, has resigned from the employ of that firm to accept the position of travelling representative of the firm of Smith, Kline & French Co. He will have the Northwestern territory of Pennsylvania, formerly filled by C. H. Willis, deceased.

The store at 24th and Lombard streets, belonging to the estate of J. H. Munson, has been purchased by L. A. Breidinger, who for several years had been Mr. Munson's head clerk.

The chemical works of the Keasby & Mattison Company, at Ambler, which shut down some weeks ago, resumed operations last Friday, with a decreased force. The company, when running full handed, gives employment to several hundred hands.

W. H. Irwin's store at Altoona was burned out on July 24th.

Dr. Bissel's store at Mahanoy City was burned out recently.

Dr. Adolph Poehner has purchased the pharmacy recently conducted by Dr. McMillan.

Wm. H. Betz, a graduate of the Philadelphia College of Pharmacy, Class '94, was married July 18th to Miss Jennie Drew. Mr. Betz is chief clerk with F. S. Hughes at 15th and Oxford streets.

The halls of the Philadelphia College of Pharmacy have a deserted appearance, but within six weeks they will resound with questions emanating from the embryo druggists. Actuary Wiegand is getting ready to get out his circular and he expects the class of 1894 to be larger than ever before. The chemical laboratory is to undergo extensive improvements and electric lighting is to be introduced so that each student will have an independent light.

Bullock & Crenshaw, one of the oldest drug houses in this city has taken on a new lease of life and the consequence is that their business has greatly improved.

The Reading Terminal drug store of Isaac Cohen is one of the features of Twelfth and Market streets. The store is fitted up in a grand style and

the soda water fountain is not only an attractive one but one which bears inspection. Mr. Cohen is doing a good business and he deserves to as he is willing, obliging and ever ready to do a favor.

Peacock & Manger, of 255 North Fifth street, are among the most enterprising of the druggists of this city, and evidence this by not only having good products, but also by energetically letting it be known that they have. Under date of July 12 they issued one of the neatest and most artistic folders that has yet been sent out by any manufacturer of pharmaceuticals. They have taken off all the discounts and sell at spot cash prices for spot cash. They propose to have no accounts good, bad or indifferent, and the salvage thus effected, both in expense of book keeping, collecting it, and in the loss from bad debts will be given to the purchaser. Under any credit system there is a certain inevitable loss *which must be made up by those who do pay*. Peacock & Manger do not propose to let any one person pay for another's goods, and believe that by dealing on a strictly cash basis they can effect a material saving for their customers.

MARYLAND.

BALTIMORE, Aug. 4.—At the regular meeting of the Maryland College of Pharmacy, at the college building on Aisquith street, near Fayette, the following officers were selected for the year: President, Louis Dohme; first vice-president, Henry A. Elliott; second vice-president, Columbus V. Emich; treasurer, Samuel Mansfield; secretary, John W. Geiger, and Charles Schmidt as one of the Board of Examiners. The association also elected its delegates and alternates for the coming Asheville Convention of the A. P. A. In the absence of the secretary, John W. Geiger, who was sick and could not attend, Prof. D. M. Culbreth filled his post capably. The heat of the summer and close attention to business has incapacitated Mr. Geiger to some extent, and it is the universal hope of his acquaintances and the pharmacists of the city that, with the bracing breezes of the Fall, he will regain his former vigor and interest in public affairs.

THE BOARD EXAMINATIONS MORE PRACTICAL.

The candidates who will hereafter come before the Board of Pharmacy will find their examination augmented by being required to display more practical knowledge than has been previously asked of them. The commissioners have made arrangements by which they may have the benefit of the specimens at the college and the apparatus in the laboratories. By this move they hope, in the course of time, to make the standards the same and leave no room for that branch of the profession who do not think the board licenciate as good as the Ph. G.

INFERIOR MILK.

The milk inspectors of the board of health have been playing sad havoc with the contents of the cans of some dairymen who have been so unfortunate as to be detected with their wares below standard. The public attention being directed to the frauds in this business has resulted in an increased demand for condensed milk.

MINOR NOTES.

Mr. Westcott, of the firm of Hynson, Westcott & Co., is enjoying his vacation at the sea shore.

Geo. P. Costello has qualified before the Board and has registered for the Walbrook Pharmacy; Geo. E. Brown, proprietor.

E. O. Street has passed the Board of Pharmacy, and has registered for his recently opened pharmacy at the corner of Jefferson and Bond streets.

Will Barnes has made an assignment yesterday of his half interest in the drug store of Barnes & McCord, at Trenton, O. G. Bain being made the trustee. The assignment is made in the interest of creditors from whom the stock was bought and was caused by disagreement of the partners. The stock was invoiced and divided, the trustee having the assigned half removed.

The pharmacists of the city have been surprised at the new venture of our chief cutter, Wm. H. Read, in introducing a prescription department in his store. Mr. Read has heretofore drawn a line at this part of the business, but he recently engaged W. H. Wolfe, a graduate of the Philadelphia College of Pharmacy, and placed him at the head of this new department.

William Sparks Thompson, trading as the Crown Perfumery Company of New York has filed a bill in the United States Circuit Court against the Winkelmann-Brown Drug Company of Baltimore for alleged violation of the trade-marks on two perfumes—"Lavender Salts" and "Crab Apple Blossoms." An injunction is asked for, restraining the defendant company from manufacturing perfumes on which is placed the trade-mark claimed to be infringed and for an accounting.

SOUTHERN NOTES.

S. A. Brown, doing business as S. A. Brown & Co., at Houston, Tex., has given chattel mortgages amounting to \$10,000.

Miss Belle Ferguson, of Key West, Florida, has, it is said, invented a process for producing a delicious vinegar from pineapples. The vinegar is of fine topaz color and as clear as wine. It is said to have a delightful fragrance and flavor of its own and to contain no adulteration nor foreign acid.

W. M. Yearby, the enterprising druggist, has bought out the drug store of Dr. Whitehead of Chapel Hill, N. C., and consolidated it with his own drug business at that place. His store at Chapel Hill is one of the handsomest and best arranged drug stores in a town the size of Chapel Hill that can be found.

J. H. Mayberry, doing a drug business at the corner of Cherry and Ash streets, Nashville, Tenn., has made a special assignment to the Nashville Trust Company, of all of his stock contained in the above store-house to secure creditors. The principal debt is one of \$1,500 due A. Nickel. The other liabilities are small, ranging from \$1.10 to \$70.98, due merchants, principally of Nashville. The total liabilities aggregate \$2,282.44.

R. L. Hoffman, a druggist of Roanoke, Va., has made an assignment to S. Hamilton Graves, trustee, conveying his entire stock of drugs, chemicals, etc., for the payment of his indebtedness. The preferred creditors are those from whom Mr. Hoffman borrowed money to purchase the interest of his late partner, Frank Coffman, deceased. All the other creditors are in the general class. The liabilities are \$2,000; assets about \$2,500.

The stock of the popular Pansy drug store in Atlanta, Ga., has been removed

from its old quarters on the corner of Wheat and Jackson streets to a new and elegant brick building on the corner of Houston and Hilliard streets. The Pansy, since its progressive proprietors opened business, has made a most enviable reputation as a first-class drug store, and has built up a very fine patronage among the residents of that portion of the city.

Mr. Joseph W. Howard, who has been a resident of Washington, D. C., since the war, died on July 27th at 611 L street, where he has conducted a drug store for the past two years. For several years subsequent to 1876 he kept a drug store corner of 7th and I streets northwest. He was born in Richmond, Va., in 1841, and served in the confederate army throughout the war, going to Washington immediately after the surrender of Gen. Lee. Mr. Howard was an active and advanced member of the Masonic order.

The Georgia Board of Pharmacy wish to inform their licentiates, that the last legislature at the request of nearly 95 per cent of those registered on the annual plan, adopted Dr. Kendrick's amendment. This amendment restores the old fee to \$15 and makes the license permanent. Those registered under the annual plan can now secure a permanent license by remitting \$10 to the secretary, Dr. H. R. Slack, Lagrange, Ga. All annual Georgia licenses expire September 1st, and should, therefore, be renewed this month.

A thief broke into the Temple pharmacy, at Liberty and Whitaker streets, Savannah, Ga., recently. A pane of glass in the door leading to the proprietor's office in the rear of the drug store was broken. The key was on the inside and the thief only had to place his hand through the broken glass and turn it, and then the store was open to him. A cash register in the store was carried into the office and opened. There were but a few coppers in it. A box of lead pencils and some cigars were also taken. The thief had planned to carry off a large quantity of cigars and had filled a basket with them, but he was scared off and left the basket in the store.

North Carolina Board of Pharmacy.

The North Carolina Board of Pharmacy will meet in the city of Asheville on Friday and Saturday, August 31 and September 1, beginning at 9 o'clock A.M., for the examination of candidates for license to practice pharmacy. Candidates must commence the examination on Friday morning.

Any further information will be given by the secretary of the Board, Wm. Simpson, Raleigh, N. C.

A Stammerer Aided.

One of the oddest experiences that I ever had with my stammering, says a man who has an incurable impediment in his speech, happened in the shop of an apothecary in London.

As I was suffering from a stomach trouble, I went into the apothecary's to get a little ipecac.

"I want some ip-ip ip-ip"—I stammered, unable to get out the rest.

"Some what?" he asked.

"Ip-ip ip"—

"Hooray!" shouted the apothecary at the top of his voice. He thought I was giving him the word to cheer.

OHIO.

CINCINNATI, O., August 6.—During the past few days there has been no end of talk among local druggists about the murder of John Ohmer, who was poisoned with strychnine. Nearly every pharmacist in town has been an attentive listener to the proceedings in Coroner's Court, and much anxiety was shown as to who sold the poison to Martin Adams, the young blacksmith, who is locked up charged with the crime. Never was there so much talk about poison registers among pharmacists in this city before. After the proceedings at the Coroner's Court many a poison book was gotten out and dusted off for fear of an investigation being ordered by the proper authorities. It is thought that the only thing which now stands between the man suspected of Ohmer's murder and the gallows is the name of the druggist, who sold the poison. The Coroner wants the authorities to promise the guilty pharmacist immunity from prosecution and hopes in that manner to get conclusive evidence against Adams. Professors William Simonson and C. T. P. Fennel of the Cincinnati College of Pharmacy, have completed their examination of the dead man's stomach and brain and have found large quantities of strychnine. The former found enough of the deadly alkaloid in the brain of the deceased to kill a frog that weighed seven ounces. Professor Fennel found enough strychnine in one-fourth of the dead man's stomach to kill a dozen persons. He also analyzed the sediment in the beer bucket from which the deceased drank and found one-fifth of a grain of strychnine.

WHO SOLD THE POISON?

It is known that Adams tried to purchase strychnine at Weatherhead's and Boehmer's drug store, and that he called at other pharmacies in the downtown district for the same purpose. The police have been quietly investigating as to what druggists record their poison sales in a book and hope in that way to secure a conviction. No attempt will be made to prosecute the druggist, as the man under suspicion, doubtless obtained the poison on the representation that he wanted it to kill rats. It may be stated, however, that poison registers will be used much more than they have heretofore.

PROFESSOR SIMONSON ON THE POISON LAW.

"The poison law is a farce," said Prof. William Simonson in speaking of the case in question the other evening. "It should be amended in some way and I think the matter will be brought before the Legislature at its next session in Columbus. It is not generally known, but very few druggists keep poison registers in their stores. Almost any person when he is known to the druggist can obtain poison upon the pretense that he wants it for some legitimate purpose. Nearly everybody knows that potassium cyanide is used in the arts, and I venture to say that it would be an easy task to procure that drug in a great many stores on the pretense that the purchaser was a photographer. It was used not long ago in a suicide in this city and was doubtless procured in the manner mentioned above. While our poison law is radically wrong there is no denying the fact that those so disposed can always get poisons when they so desire."

THE PARK INJUNCTION SUIT.

There is still a great deal of talk in local drug circles in reference to the dismissal of the now famous injunction suit of John D. Park & Sons against the wholesale drug-

gists of this city and the Committee on Proprietary Articles of the N. W. D. A. As stated in the last issue of this journal, the suit was dismissed by Judge Hunt of the Superior Court, without prejudice, at the cost of the plaintiff. It is thought that this will end the matter of Park & Sons, and others who are recognized as cutters trying to "get back" at the jobbers through the medium of the courts. The suit was of vital importance to the wholesale druggists all over the country, and the victory of the defendants will be hailed with joy by all pharmacists opposed to cutting. It would seem "to a man up a tree" that the N. W. D. A. is still on top. If any suits of the nature of the one just ended here are filed in any portion of the country it will doubtless be in the federal courts.

BUCK EYES.

Soda water business is booming.

There is a scarcity of sponges in this market.

A great many druggists are out of town on their summer vacations.

The store of T. P. Taylor and of Mr. Wick at Celina were destroyed by fire on July 26th.

A. Burger, Adams street and Franklin avenue, Toledo, lost \$40 from his cash drawer through a burglary last month.

D. R. Fill's store at Orangeville was burned out in the latter part of July in a fire which destroyed three or four stores.

The entire stock of Allen and Company has been sold at the Blymmer Building on Main street. A number of retailers got bargains.

E. P. Orth of Dunkirk has made an assignment with assets of \$12,000 and liabilities unknown, but believed to be greatly in excess of the assets.

Forest Griseo, a well-known pharmacist of Springfield and Dr. Dean of New Carlisle have gone into partnership in the drug business at Middletown.

F. M. Gorman, assignee of F. Egner & Company, is selling out the large stock of the above-named company at auction. The Egner store was one of the oldest in the city. It was at Fifth and Race streets for a number of years.

Dr. A. Smedley, one of the oldest druggists and physicians in this country died last week of general debility. He was the father of the well-known pharmacist of the same name, and had lived in retirement for several years.

One day last week Ed. Voss, who conducts two first class drug stores in this city received from his grandfather in the old country a copy of an old German work. The time-honored book is a rarity and has been seen by a number of local druggists.

Harry Gradel, the well-known pharmacist, has his new building on Mt. Auburn almost completed, and it will be ready for occupancy in a short time. It will without doubt be one of the swellest drug stores on any of the hill tops around the city.

Ed. Bachus, who is seen to open a pharmacy at Freeman avenue and Everett street claims he will have one of the nicest stores in the west end. The fixtures will be of mahogany and will be decidedly up to date. The store ought to be a winner.

John Bauer has resigned as special inspector of drugs at this port. His successor will be Ferd Ott, who was appointed one day last week by Surveyor of Customs Lemon. Ott is at present engaged as a relief clerk. He is a good man for the place.

George Budde, the hustling city salesman for the Stein Vogeler Company was in Dayton, O., last Wednesday on business. George reports business in the Gem City as on the boom. There have been several changes in that city however, in the last few weeks.

George Kylius, the well-known druggist, is negotiating for one of the best drug stores in Covington. If negotiations, which are pending are completed, he will have a sure bread winner. The store referred to is conducted by one of Covington's city officials.

One of the land-marks of Mt. Auburn, a tree in front of Bingman's drug store blew down during a storm the other evening. A small sapling was found to have grown in the hollow trunk of the time honored tree, which was blown across Highland avenue.

Bob West, the clever traveling salesman for the Hale Justis Company, returned to the city last Saturday night after an absence of several weeks. Bob says business is picking up and that the prospective passage of the tariff bill will help the affairs of the country.

Will Wagner, who recently purchased the drug store at 7th and Vine streets has made a number of changes in his pharmacy. Some elegant new gold signs now adorn the windows and the interior of the place has been entirely metamorphosed. Mr. Wagner reports trade as picking up.

Mike Hornbeck, the druggist at Main and Woodward streets, has invented a new label case, which is said to be the most complete of any ever before seen in this city. For convenience and appearance the new case is said to be without an equal. A stock company is to be organized to make the cases.

The next session of the College of Pharmacy will begin on the fourth of next month. Secretary Simonson has received a large number of communications from parties desiring to attend the school and the next session promises to be a well attended one. A class of junior students is putting in the summer months taking botany tours under instruction of Prof. Lue.

Harold E. Gatch, attorney for the state board of pharmacy has sworn out an affidavit in police court for the arrest of J. E. Volk, a druggist in Mt. Vernon avenue, Columbus, for conducting the business of a druggist without being a registered pharmacist. Volk has been arrested on two or three previous occasions on the same charge, but each time has been dismissed on account of some deficiency in the affidavit.

Minnesota Board.

The state board of pharmacy completed the examination of candidates for registration, on July 20. The applicants numbered forty-five and the following were granted certificates: Pharmacists: George A. Ball, St. Paul; Austin A. Ramage, Minneapolis; Fred W. Schaffer, Sacred Heart; Frank L. Glotzbach, Faribault; Joseph C. Giere, Hayfield. Assistant Pharmacists—George H. Stevenson, Vincent Hehl, Jr., Edward H. Nelson, Elmer E. Miller, Jacob Jacobson, Minneapolis; Walter M. Gemmel, Swan R. Carlson, George H. Cameron, Walter R. Lienau, Wesley St. Clair, St. Paul; James J. Bilsborrow, Graceville; L. E. Congor, Mora; Clinton E. Conley, Cannon Falls; Guy E. Halgren, Watertown; Frank F. James, Ely; L. T. Olson, Detroit; Frank L. Shimmmin, Buffalo; L. R. Williams,

Annandale; Mathias Becker, Jr., St. Cloud; Alva P. Davis, Redwood Falls; Emil Peterson, Duluth; Alfred R. Halstead, Mankato.

MICHIGAN.

DETROIT, Mich., August 5.—There is no material change in the general business interests of this city, although there are many optimists who are hopeful of a revival in the fall providing certain obstacles to an improvement are removed. Confidence must first be restored by a settlement of the tariff question, for then, and not until then, can business men base their operations upon well-defined lines. Detroit is singularly dependent upon her manufacturing industries, and many of the largest have been closed down for many months. A hopeful sign of returning prosperity is seen in the resumption last week of the Peninsular Car Works, which employs 1,200 men and the Diamond Match factory. These moves are regarded here as favorable symptoms.

THE DRUG TRADE PROSPEROUS.

But to come down more particularly to the drug trade. The condition of this industry may be read in the reports of the great commercial agencies. No large failures have been noticed, although many of the small retail stores have been compelled to file chattel mortgages on their stocks. The jobbers and manufacturers have apparently adjusted themselves to the prevailing conditions, and as a whole, are in better condition than almost any other line of business. Staple drugs receive as large a demand as in better times, and although the orders are not quite so large they make up in being more numerous. The retailers in this city have reaped a rich harvest of golden shekels during the last few weeks. Detroit is an especially thirsty city and the many elegant soda fountains have seemingly been taxed to their utmost limit. Among those who have done an especially good business in the dispensing of cooling drinks, are Stevens & Todd, W. H. Burk & Company, and James Vernor, who stakes his reputation on his famous "Vernor's ginger ale."

NOTES FROM ALL OVER THE STATE.

On Friday, August 3, the little village of Lake View, was nearly wiped off the face of the earth by fire. The department was unable to cope with the flames and about \$80,000 worth of property was destroyed. Among the losers: C. F. Braden and Dr. John Kirtland, druggists. C. D. Lovely was also burned out. His loss was \$2,400.

Another fire at Saranac, destroyed K. Huntley's drug store entailing a loss of \$1,000.

Parke, Davis & Company recently shipped a large consignment of goods to Australia. This firm report that they are having steadily improving business.

The doctors and druggists of Owosso recently played an exciting game of base ball in which the latter were victorious.

Dr. Carpenter of Clare, has moved his drug store to more commodious quarters on South Main street.

George C. Ray, the popular Bay City druggist has a rare collection of fine relics. Among them is an Indian stone battle-axe which weighs three pounds. Indian relics are one of Mr. Ray's hobbies.

J. D. Sheridan has purchased the drug stock of C. L. Brundage for \$5,000 and will hereafter conduct the business. It is known as the Opera House Drug store and

is one of the finest in that part of the state. Mr. Sheridan is an experienced pharmacist and came from Brooklyn where he has been in the business for fifteen years. The Muskegon is the most complete in the city.

B. M. Patterson, of Grunow & Patterson, Detroit, has returned from a three months' trip to Europe.

R. Opperman, druggist, Detroit, has removed his stock from 41 to 17 Cadillac square.

Bryant Weed of Centerville, recently lost his stock of drugs by fire. Damage \$3,500, insured for \$3,500.

A. S. Johnston the Alpena druggist has sold out.

J. P. Williams of Mainstee, has given a bill of sale for \$1,500.

Jacob Jessen & Co. of Muskegon, has been succeeded by the Jacob Jessen Company.

W. H. Keys of Bay City, was recently waylaid by highwaymen who knocked him down and attempted to rob him. Mr. Keys threw away his pocket book containing \$20 and upon regaining consciousness, found it intact.

The drug firm of H. A. Stafford & Company, of Marquette, has been incorporated. The capital stock of \$30,000 has been paid in. The following are the incorporators: A. Stafford, W. D. Manneess and W. H. Stafford.

G. H. Davis of Detroit, has bought out H. A. McLarty, 646 Michigan avenue and will continue the business. He was formerly in the employ of Lambert & Lowman.

A. W. Bellers now has charge of the store at 284 Jefferson avenue, Detroit. Its former proprietor, Mr. Tournier, has been compelled to give up work on account of ill health. It is said that he is not in his right mind.

The Brainard Street Pharmacy is the name of a new store corner of Brainard and Crawford streets, Detroit. J. M. Meeder is the new proprietor.

The drug store of Cowles & Company, at Durand was destroyed by fire last week. The loss on the building and contents will amount to \$2,300, and the insurance is \$600.

Henry Cleland, druggist at the corner of Mountcalm and Clifford streets, Detroit, has renewed a chattel mortgage to Farrand, Williams & Clark for \$376.86.

George Newton, grocer and druggist at Jackson has sold his stock of groceries and will hereafter confine his attentions to his drug business.

Druggist Brown of Ann Arbor, recently had his high grade bicycle stolen. The thief expressed a wish to purchase a wheel and was allowed to take a trial spin. A reward of \$50 has been offered for the apprehension of the young man.

Harry Adams of the Knill Pharmacy, Port Huron, is taking a vacation. While he is absent Moses Graybiel will take his place.

Parkinson's pharmacy at Saginaw has lost a good man in the shape of William Benedict who has been with him for the last three years. Mr. Parkinson will start a drug store at Belding. He will be associated with Dr. I. S. Morris who has been a physician in Midland County for many years. The style of the new firm will be W. I. Benedict & Company. They will succeed the business of Meloche Brothers at Belding. The store is the best in the place.

John Trembly, a clerk in Lyman's drug store at Manistee last week received severe injuries from jumping off a rapidly moving motor car. He was thrown on his head and was unconscious for several hours.

Stanley E. Parkill has been re-elected secretary of the Michigan Board of Pharmacy for the ensuing year.

John H. C. Vandensie, an Ionia druggist has been sentenced to pay a fine of \$100 for selling liquor as a beverage.

Paalzow's drug store at Menominee caught fire recently from a box of waste paper but was extinguished before any extensive damage was done.

R. D. Wheaton of Charlotte, has traded real estate in that city for a drug store in Battle Creek. It will be managed by Mr. Goodale, his son-in-law at that place. The stock is worth \$7,000.

Simpson & Peer the Ionia Druggists have placed a new soda fountain in their store. This firm have an especially attractive show window.

A Woodward avenue druggist at Detroit recently displayed the following catchy sign in his show window: "Special for to-day: Pingree phosphate, a very Rich drink." As these two men were rivals for the republican nomination for governor it will readily be seen that the sign came in "pat."

E. W. Shram, representing A. J. Hilbert & Company of Milwaukee, is visiting the trade in Northern Michigan.

James A. Bassett, with Williams, Davis, Brooks & Company, Detroit, is looking after the firms' patrons in Bay City.

O. Gould, of Owosso, has removed his drug store from the corner of Washington and Main streets to Charles Jackson's store, 117 West Exchange street.

The meeting of the Michigan Board of Pharmacy for the purpose of examining candidates for registration, will be held at the Douglass House, Houghton, August 29 and 30. The examination of candidates for both registered and assistant pharmacists will be given Wednesday, August 29.

A medical company has been organized in Jackson and articles of association have been filed with the county clerk. It will be known as the Michigan Empire Hernia Cure company and its purpose is for the treatment of hernia and other diseases. The company will commence business in the city immediately with a capital stock of \$6,000 all paid in. The stockholders are Lewis Hartough \$3,500 and Dr. Presca I. Edwards \$500 of this city and Leo S. Parsons \$1,000, and John I. Copeland \$1,000, of Union City.

A few weeks ago Miss Lizzie Bacon, who had been attending school in Kalamazoo, went to her home at St. Johns. It now develops that just before her departure she and Burt Fisk, one of Kalamazoo's druggists, were secretly married at Buchanan by Rev. I. Wilson. Last Friday Mr. Fisk started for St. Johns on his wheel and returned with his bride.

Ed. M. Bailey of Globinville was put under bond for trial on the charge of having violated the local option law. Mr. Bailey protests his innocence.

The Topeka Drug Co. has been chartered with a capital of \$10,000. The place of business is Topeka, Kas. The directors: P. J. M. Burket, E. C. Burket, and F. O. Burket of Kingman; H. C. Hulit of Topeka, and D. L. Green of Wichita.

MISSOURI.

St. Louis, Aug. 3.—The St. Louis Apothecary's Society, which at one time caused considerable stir in our local drug circles by its dealings with the cut-rate problem, has been leading a rather quiet life during the past few months. The annual meeting was held last spring and officers were elected for the incoming year. Dr. Thos. Layton was re-elected president. The doctor is now getting the druggists in line once more, and, as the president says, they have the members and the right kind of members, so that when he gets them ready for action once more we may look for some good substantial work in regard to this very perplexing cut-rate problem.

The St. Louis Drug Clerk's Society has just had its Constitution and By-laws incorporated in pamphlet form for distribution among its members and their friends. Arrangements are now all completed for their excursion down the Mississippi on the evening of August 8. They have a very nice programme prepared. The drug clerks of St. Louis have long enjoyed a reputation of being, individually, A1 entertainers, and now that they have combined their energies for this occasion, their friends will without a doubt be entertained in a manner which they will not forget very soon. They are taking great precautions in the distribution of tickets, as they intend to make this a very select affair.

THE ALUMNI EXCURSION.

The excursion given under the auspices of The Alumni of The St. Louis College of Pharmacy on the evening of July 19th, was a decided success. The attendance was very large. Nearly all the members of the Faculty and Board of Trustees were present. Several of the leading physicians of the city found time to attend, but of course the great majority present were retail druggists. The wholesale drug houses of the city were all represented by members of the firms. It was a very pleasant evening; music and refreshments were in abundance, and all present went home feeling that this was the most enjoyable event of the season, and regretting that it would be one year until the Alumni gives another excursion.

COMMITTEE OF THE COLLEGE OF PHARMACY.

At a recent meeting of the Board of Trustees of The St. Louis College of Pharmacy the following committees were appointed by Chas. Gietner, Chairman of the Board.

Committee on Hall, S. Boehm, Adolph Braun, Cyrus P. Walbridge. Committee on Cabinet and Apparatus, Dr. Thos. Layton, H. W. Scheffer, Wm. C. Waldeck. Committee on Library, Wm. K. Ilkhardt, E. P. Walsh, Prof. G. Hinrichs. Committee on Publications, Prof. J. M. Good, Dr. J. C. Falk, E. A. Sennewald. Auditing Committee, Adolph Braun, Dr. Thos. Layton, Wm. C. Waldeck. Committee on Examinations, Theoretical Pharmacy, Cyrus P. Walbridge, Wm. C. Bohm, E. P. Walsh, A. P. Kaltwasser. Practical Pharmacy, S. Boehm, Ambrose Mueller, J. C. Falk, H. F. A. Spiker. Theoretical Chemistry, H. W. Scheffer, E. A. Sennewald, H. E. Hoelke, J. F. Fahlen. Practical Chemistry, Dr. Thos. Layton, F. W. Sennewald, H. W. Scheffer, H. Y. Fisher. Theoretical Pharmacognosy, Adolph Braun, Wm. C. Waldeck, Dr. Alois Blank, Thos. A. Buckland. Practical Pharmacognosy (microscopy), Dr. J. E. Falk, Wm. K. Ilkhardt, Wm. C. Waldeck, Thos. Knoeble.

BRIEF BITS.

A very young druggist appeared in the family of W. R. Schettles, 5800 N. Broadway, a few days ago.

G. Weinsberg, Marion and Menard streets, recently had a young druggist appear in his household.

E. J. Waldeck, pharmacist at 3600 N. Broadway, is out on a ten days' fishing and camping expedition over among the lakes of Illinois.

Jo. Femm, pharmacist at 20th and Bidle streets, is wearing a happy smile since the appearance of a young heir in his family a short time ago.

Jules B. Huber, who for some time had a drug store at 19th and Hebert streets, is running Mr. Zahn's store while that gentleman is in New York.

F. A. Roepper, 1400 Pine street, has just returned from his usual summer vacation out among friends and relatives in the western part of St. Louis.

Chas. Caffall, manager of The Judge & Dolf Pharmaceutical Company of this city, has gone out on the Gasconade River on a grand fishing expedition.

Gustavus Koch and H. F. A. Spilker, two prominent St. Louis druggists, attended the picnic given by the Knights and Ladies of Honor at Forest Park a few days ago.

The Missouri State Board of Pharmacy hold their next meeting for the examination of candidates for Certificates of Registration, in St. Louis, about the middle of next October.

Dr. F. L. James, editor of *The National Druggist*, returned on the first of the month from a four weeks' vacation down on the Gulf. The doctor says there is no place like St. Louis.

Mrs. Chas. H. Zahn, whose husband owns a drug store at 19th and Sydney streets has been visiting in Europe for several months, and Mr. Zahn will meet her in New York in a few days.

Ott Bros., of Sedalia, Mo., have just bought the store formerly owned by The Overstreet Pharmaceutical Company. One of the Ott Bros. is traveling for a wholesale drug house of this city.

Wm. C. Waldeck, one of the trustees of the St. Louis College of Pharmacy, and proprietor of The Brennen Pharmacy, 3625 N. Broadway, has just returned from a months' visit to Lake Minnetonka, Minn.

Dr. Chas. Knecht, 11th and Autumn streets, has returned from his visit in the southern part of the State looking and feeling much better than when he left. He must have devoted his entire time while away, to fishing, in order to have caught all those fish he is telling his friends about.

A Mr. Tamm and a Dr. Gervenewald, two drug store proprietors in the extreme northern part of the city, are causing quite a stir in that neighborhood by the cut-rate war they are waging on one another. Each one is trying to cut prices lower than the other and their patrons are getting the benefit of the war.

G. H. J. Andreas, ex-president of the Alumni of the St. Louis College of Pharmacy, and proprietor of the drug store at Park and Mississippi avenues, has just launched out and opened up one of the nicest stores in St. Louis, at Grand avenue and Shenandoah street. Mr. Andreas is one of our most progressive pharmacists and this is a model drug store in a very desirable locality, so his friends all predict him much success in his new enterprise.

Dr. J. C. Falk made a hasty trip to St. Genevieve about a week ago.

Geo. Ude, druggist at Grand and Garison avenues, is visiting in California.

It is reported that the Wolf-Wilson Drug Co. are soon to open a store in East St. Louis.

C. H. West, at the head of the Moffat-West Drug Co., has just returned from a vacation trip to Arkansas.

Otto J. Presser, a prominent druggist of Tipton, Mo., has just returned home after a week's visit in this city.

John A. Fritz, druggist at 22d and Benton streets, has just returned from an excursion trip to St. Paul, Minn., by boat.

The homoeopathic pharmacists have offered to furnish medicine gratis to the fresh air mission this summer.

John H. Childs, one of the leading druggists of Austin, Texas, has been spending a few days in our city, buying goods for his store.

Adolph M. Fluke recently resigned his position as head clerk at the Laclede pharmacy to accept a more desirable position with Allen's pharmacy.

J. T. Carey who has charge of the Carey Bros., drug store at California and Cherokee streets, has recently been quite sick, but is at present reported much better.

G. H. Scheel, Fourteenth street and Clark avenue, is now the father of a bouncing baby boy, born a few days ago, while the family were at Salt City, Wis.

B. A. Gardner, who has charge of the prescription department of the Allen pharmacy, 7th and Olive streets, is spending a well earned vacation, in the North.

The Laclede Medicine Co. of St. Louis has been incorporated with a capital of \$10,000. Incorporators, August T. Kessler, William F. Klusmeyer and Hallie Dawkins.

Wm. Bade has sold his interest in the Pouley Pharmacy at 14th and Madison streets, and is now filling prescriptions for Dr. Baurer, who has an office in that neighborhood.

Otto B. Ilch, recently head clerk at Halpin's Pharmacy, Grand and Olive streets, has left for Minneapolis, Minn., where he expects to embark in the drug business for himself.

Lehmann Bros., who have for some time had a store at Boyle street and Old Manchester Road, have recently opened a new store on New Manchester Road, but a few blocks from the old stand.

Adolph Braun, pharmacist at Elliott and Gambol street, has returned from his summer vacation at Elkhart Lake, Wis. He left his family there, however, and will return for them later in the summer.

It is reported on pretty good authority that O. C. Ruge, druggist at 19th and Hebert streets, is to be married within the next few days, but Mr. R. refuses to give any more information on the subject.

Oscar O. Otrich, a prominent druggist of Anna, Ill., was married in this city last night to Miss Margaret E. Sumral, of Jerseyville, Ill. A number of Mr. Otrich's friends residing here in the city were present.

George and William Billerth, pharmacists at Jefferson avenue and Benton street, have just returned from quite an extended fishing trip down the river. They brought back a good supply of fish stories, if they did leave their fish behind. They expect to go again as soon as they get rested up from this jaunt.

Dr. H. M. Whelpley, Otto Claus, O. F. Heitmeyer and G. H. Chas. Klie, four St. Louis pharmaceutical men, took their families and spent a day at Spanish Lake, about thirty miles from the city, a few days ago.

John Schneider, druggist at 2801 Morgan street, who has been a sufferer from Bright's Disease for a number of years, started for California about a week ago, and word reached here a few days later, that he had died at Salt Lake City.

Lena Woolsey has filed suit in the circuit court against Sheriff Peterson to replevin a stock of drugs at the corner of Kansas avenue and Packard street, Kansas City. The store was taken possession of by the sheriff a month ago on an attachment.

A short time ago the wholesale drug houses of St. Louis were invited by the city to submit bids on fifty barrels of copperas, to be used for sanitary purposes. The Moffat-West Drug Co. evidently submitted the most satisfactory bid, as the order was placed with that firm.

H. F. Prien, Meyer Bro's. salesman for the Pacific Coast, had just returned to his field of duty from a very pleasant vacation, when the strike was declared, and for three weeks he was unable to place an order, but he has more than made it all up in the short time since the strike was raised.

H. P. Physick is in the city enjoying his vacation at home, after devoting the past six months to traveling in Southern Texas in the interest of the Meyer Bros. Drug Co. That climate seems to agree with him, as he looks heartier than ever and in spirits may be rated A1. He reports the outlook for trade in that section as being of the most encouraging nature.

Charles J. Frankel, a very young doctor, who has been in several scrapes in regard to money matters, has bobbed into public notice again by the securing of a warrant against him yesterday on the information of H. C. Brenner, a druggist at Page and Prairie avenues. Brenner charges that on July 11 Frankel entered his store, and after talking considerably about having \$3,000 worth of property which he wanted to sell, persuaded him to cash a \$9 check on the Continental National Bank. The check was no good, the druggist states, the warrant has not been served, owing to the disappearance of Frankel, who lives at Ella and Warne avenues. Frankel is said to have fleeced several other druggists out of small sums in one way or another.

Henry M. Howard, a druggist, while on his way to Indianapolis with his wife, was arrested in East St. Louis, on a charge of disposing of \$700 worth of mortgaged drugs. Howard, a few weeks ago, opened a drug store on Fourteenth and North Market streets, purchasing his stock from the J. S. Merrill Drug Co., and giving, it is said, a chattel mortgage on the stock and some real estate at Cairo, Ill., as security for payment. When seen by Chief Desmond, Howard said it was not his intention to defraud the Merrill Drug Co., but he said he had sold out to Brown and moved some of the goods out of store in order to beat him. Desmond states that Brown is said to have paid Howard \$300 for the stock. The parcels Howard had prepared to ship consisted of drugs and cigars. Thus far Brown has not appeared at the Four Courts to give his version of the affair. Mrs. Howard, the prisoner's wife, is not under arrest.

WESTERN NEWS NOTES.

Dickinson's pharmacy has just been completed at Little Rock, Ark.

The Brown Pharmacy Company at Amelia was burnt out recently.

Tom Fisher has moved into his new brick storeroom at Liberty, Neb.

J. W. Crooks of Duluth, Minn., has made an assignment to N. J. Miller.

Scott & Newell's store at Aberdeen, S. D., was burglarized in the latter part of July.

The Ormsby & Martineau Drug Co., of Logan, Utah, have filed articles of incorporation.

A. M. Root has moved from Elmwood, Neb., to Alvo, where he has purchased a drug store.

C. C. Naber Company of Shawano, Wis., filed an amendment, changing its name to the Naber Drug company.

The drug firm of Keeler & Mallory at Wausa, Neb., have dissolved partnership, W. G. Mallory continuing the business.

Frank B. Johnson of Mankette, Wis., has been fined \$50 and costs for selling poisons without being a licensed pharmacist.

The H. Reynolds Drug Co., of Greeley Col., have moved their stock into more commodious quarters and have purchased an elegant Tufts soda fountain.

W. W. Cole, of Nelegh, Neb., is visiting T. A. Davis at Pawnee City. Mr. Cole was formerly a partner of Mr. Davis in the drug business at Oakdale.

The town of Belle Plain, Ia., was almost wiped out by fire on July 28th. Among the sufferers were, Vannmeter & Co., and Swift & Co., two drug firms.

G. S. Flory has severed his connection with Rogers & Colwell of Pawnee City, Neb., as clerk, and accepted a similar position with O. W. Beckwith of Beatrice.

The druggists of Fort Wayne, Ind., are not thoroughly agreed as to whether they shall remain open Sundays or not, and while some close up others keep their stores open.

James Kennedy, who formerly conducted the store now owned by J. R. Messick at Shelbyville, Ind., will start a drug store in the room now occupied by Joseph Bros., on South Harrison street, in this city.

M. Childress who recently purchased the Palace drug store, formerly owned by E. H. Henford, Fairfield, Ia. has today exchanged the same for another drug store at Packwood, with Dr. Dennis Collins, both taking charge of their respective stores to-day.

The Milwaukee Drug Clerk's Association which has been incorporated under the State laws has elected officers as follows: H. F. Weber, president; F. X. Hufschmidt, vice-president; M. E. Trayer, secretary; C. L. Rogers, treasurer; board of directors, Ed. Roth, A. J. Luebke and J. A. Block.

A change in one of the best known firms in Janesville, Wis., is announced. W. G. Palmer retires from the drug business and his interest in the Palmer & Stevens establishment is taken by C. D. Stevens. The store is one of the best known in southern Wisconsin and the circle of its patronage, already wide, will grow steadily under Mr. Stevens' energetic direction. Mr. Palmer's plans for the future are still unsettled, and at present no announcement is made.

C. B. Anderson's pharmacy at Rockport, Ind., was practically ruined by fire on July 31st. The stock was partially covered by insurance.

The sale of the drug palace at the corner of Fifth and Main streets, La Crosse, Wis., to Mr. Groezinger, of Caledonia, has fallen through on account of the latter not being able to secure a satisfactory lease. The store was closed by the constable this morning on a writ of attachment for a judgement of \$150, held by Frank H. Lloyd.

Eugene Meyer & Co., manufacturing and dispensing chemists, Helena, Mont., occupy a half page in a recent issue of the *Daily Independent* of Helena to advertise their store as "The largest, handsomest and most complete drug store in the northwest." Most of the space is taken up with an illustration showing an interior view of the pharmacy.

McKichan's pharmacy in the Hotel Garretson block, Sioux City, Ia., has been closed and the stock is being boxed up preparatory to being removed to Wakefield, Neb., where Mr. McKichan will continue in the drug business. Pierce, Peters & Perkins will take possession of the room being vacated and a vault is being constructed for their use.

E. L. Babcock, one of the oldest and best known druggists on the south side Milwaukee, Wis., and for the past three or four years a real estate dealer in that part of the city, died at his residence on Eighth avenue, in the Town of Lake, on July 24th, at the age of 52 years. Mr. Babcock was born and reared in Brkoofield, N. Y., and went to Milwaukee when a young man and shortly afterward engaged in the drug business, in which he was successful. He soon became the sole proprietor of the store which he entered and he continued the business until a few years ago.

The drug stores of Little Rock are complaining of the depredations of an unusually smooth sneak thief, who seems to have worked a number of them quite successfully. His game is to send the clerk back out of sight for a dime's worth of cocaine, and while away to slip cologne or toilet articles off the show cases under his coat. A recent attempt nearly caused his capture by a Main street druggist. The bottle of stolen cologne slipped out and smashed with a crash on the pavement. The thief took to his heels and escaped. He is described as a dressy fellow, wearing a boutonniere and a derby hat. His voice is peculiar in tone, his complexion blonde, and he wears neither beard or moustache.

E. G. Gossett, who is having trouble in New Albany, Ind., over the sale of a drug store, states that the sale of his store had never been consummated. He said he had agreed to take a piece of land valued at \$2,000 for his stock if the stock was worth \$3,000, the difference to be paid in money. In case the stock fell below \$2,600 the whole sum was to be paid in cash, and the land was not to be considered. The matter was compromised by the attorneys by Gossett receiving 150 acres of land in Scott county and \$500 in cash for his stock of drugs. The trespass suit filed by Gossett against Morgan was dismissed, and the injunction suit of Robert Mansfield against Gossett was withdrawn, Gossett agreeing to pay off the balance he owed Mansfield on the stock.

The Wisconsin Pharmaceutical Association will hold their fourteenth annual meeting at Racine on August 14. The committee having the matter in charge

have already issued a programme for the meeting and distributed suitable badges. The programme is a neat 16-page folder with stiff covers, the gift of Frederick Stearns & Co., manufacturing pharmacists, Detroit, Mich. Accompanying it is a handsome badge, consisting of a golden medal suspended from a blue ribbon pendant to a brooch representing a golden badger. The design is neat and artistic and the medal will doubtless be kept by the members as a lasting souvenir of the meeting. The Horlick's Food Co., manufacturers of Horlick's malted milk, Racine Wis., are the donors and they are certainly entitled to all the benefits which may accrue from the advertisement.

Dr. Milton Van Dyke has commenced a suit against R. K. Latimer, and wife of Seattle, Wash., to have sale and transfer of property set aside on the ground of fraud. The complaint alleges that April 12, 1892, the defendants owned twenty-four acres in King county, subject to a \$400 mortgage; that plaintiff at that time owned a drug store valued at \$2,000 in Columbia. Latimer falsely represented to plaintiff that his land was level alder bottom, laying and fronting along the shores of Green river, and worth \$2,400, and induced Van Dyke to trade his drug store for it. The trade was made the next day, Latimer taking possession of the drug store. The land, as alleged in the complaint, is not bottom land nor alder land, and not worth to exceed \$400, which is fully covered by the mortgage. On discovering the fraud, the doctor says, he requested Latimer to transfer him the drug store and take back his land, but Latimer refused. For these reasons he wants himself decreed the owner of the drug store and Latimer enjoined from selling it pending the result of this suit.

The California Board of Pharmacy.

The California Board of Pharmacy held a regular quarterly meeting at the College of Pharmacy on July 11th.

The following were registered as Graduates in Pharmacy. Robert A. Leet, Thomas G. Inman, F. J. Kruell, Charles Teubner, L. J. Westlake, L. B. Brown, Louis A. Druehl, Walter M. Hedrick, Henry R. Harris. Registered as Licentiate without examination, Hans Dodel.

This being the annual meeting S. H. Melvin was elected President and John H. Dawson, secretary. One of the candidates for examination for the certificate of Licentiate was deprived the privilege of the examination for reason of being detected using a text book.

A meeting of the Board will be held at Los Angeles, Monday October 1, 10 A.M., probably at the Hallenbeck Hotel.

The following named passed Licentiate examination: A. D. E. DeSmet, F. A. Gegenbaur, R. A. Douglas, C. H. Ingram, J. H. Winter.

The following named as assistant: P. Moulton, F. S. Duncan, A. J. Glover, W. G. Walker, J. W. Elstun, E. Teschner, G. W. Myers.

Committee on prosecution were instructed to commence suit as rapidly as may be against all violators of the pharmacy act.

The next meetings will be at Los Angeles, October 1; San Francisco, 113 Fulton street, October 10th.

C. W. Wall, secretary and treasurer of the Myer Bros. Drug Co., is spending a month of well earned and much needed rest at Atlantic City.

ILLINOIS.

CHICAGO, Ill., Aug. 7.—While trade is becoming stronger every week and the prospects for future business are excellent, the improvement is not so noticeable in the wholesale houses. This is due to many causes, but principally to a quiet cleaning up of the tangled business incident to the strike. Everything was badly mixed by the congestion of traffic in the handling of country orders, and several days were devoted to checking up such and the ordinary business. The wholesale houses also felt the strike in the fact that many of their employes are members of the State militia and have been away from their duties. When the report circulated that the militia boys would, in many instances, lose positions because of the compulsory absence, the attachés of wholesale drug houses kept the mails loaded and the telephone wires hot for a day or two making inquiries. But there was no cause for anxiety, as their places had been held for them, and some of the firms, recognizing the loyalty of the men and the protection offered through their action, allowed full salary for all time they had been forced to remain on duty. This will have the effect of closer cementing the relations between the employers and employes.

OPPORTUNITIES FOR INVESTMENT.

Never was there better opportunity for investment in the retail drug business of Chicago than now. Good stocks, in good location, and with excellent patronage, are in the market and in many instances can be bought at a bargain. This is due largely to owners who came to Chicago for the Fair and are now anxious to return to their former homes or enter some other line of business. There is no more heavily surcharged atmosphere of speculation than in this city and men in all branches of business or professions change at a day's notice. They sacrifice the business that has been built up through years of careful attention, and this gives opportunity now for some excellent pick-ups in the retail drug business.

THE TRIBULATIONS OF A SALOON DRUGGIST.

High and dry old Evanston, with her local option blue-laws carefully guarded, has been having all kinds of conniption fits over the acts of Druggist Herman Elich. The men who went to church on Sunday and attended prayer meetings twice a week were in the habit of dropping into the drug store and buy a series of tonics and ciphers and obtain copious drafts of what the authorities finally declared was founded principally on alcohol. No one could offer to defend the druggist, and Elich was hauled up before the court and fined nearly \$1,000 on charges of selling "stomach bitters" in violation of the four-mile limit restrictions. His store was taken in possession by a constable, but was later turned back to Elich, who paid \$50 to the city and was allowed to reopen. The Citizens' League was after him, however, and only a promise to leave Evanston kept the league from proceeding further in the courts. But Elich is still doing business at the old stand, although he has announced his intention of selling out and leaving Evanston.

A CHEMICAL SMOKE CONSUMER.

A chemical smoke consumer has been invented by G. S. Spring of Chicago and recent tests indicate that there may be some merit in it. Mr. Spring describes his invention as follows:

I have not yet given it a name, but I will do so now. It is a simple compound and contains but

five ingredients. I can sell it for 25 cents a pound or even less and make a good profit. It is in the form of a powder and a pound of it dissolved in eight gallons of water will be enough to saturate a ton of coal and do away with the awful black smoke when the coal is being burned. The chemicals act on the coal so as to cause it to turn to coke a short time after it is thrown upon the fire. It increases the cost of the coal 25 cents a ton, but it makes the coal burn four times as long as it would without the chemicals and greatly increases its steam-producing power. The substance is in itself non-combustible, but, in combination with the coal, it burns readily. It will not only turn the coal to coke, but will cause whatever slate there may be in the coal to burn as well. I first began to experiment with a view to reducing the smoke in bituminous coal by means of chemicals eight months ago. My first experiments were made solely to do away with smoke. While doing this I discovered I could not only lessen the smoke, but increase the heat and reduce the quantity of coal for producing the heat desired. Having proved to my own satisfaction that my discovery was a success, when used on bituminous coal, I tried it on anthracite coal. I was greatly pleased to find it increased the steam-producing qualities of anthracite coal quite as much as it did with the bituminous coal, and it caused the coal to burn at least four times as long as it would without the preparation.

By way of making a test I put four pounds of hard coal in the kitchen stove, and in two hours it was all burned up. Then I put a like amount on the fire, saturated it with my smoke consumer, and with the same drafts that had been used with the first four pounds, it burned eight hours, and made a much steadier and hotter fire. I made a similar test with the poorest grade of bituminous coal in the heating stove in my room. In fifteen minutes the dirty slack coal, by opening the drafts, was turned to coke. I then closed the drafts and it kept the stove red hot for more than six hours. During the coking process the coal gave off a white smoke in which there was little or no soot. My next experiment was with the best grade of bituminous coal. It took nearly two hours for it to burn to coke, but when it was thoroughly coked it burned at a white heat for six hours. Another test which I made was with hard coal siftings or dust. It is almost impossible to burn it and it sells at 50 cents a ton. By using my discovery upon it I found it would burn as readily as the best quality of coal.

A COLLEGE IN COURT.

The petition of Dr. John G. McCandless for a writ of mandamus to compel the State Board of Health to issue to him a certificate was denied by Judge Windes July 17th. The relator is a graduate of the Chicago Physio-Medical College. Dr. McCandless' application to the State Board for a certificate made April 27, 1893, was refused. Dr. McCandless claimed to have complied with all the rules of the board. The evidence, however, showed he was not a graduate of a pharmacy or literary college, as set down in the rules of the State Board of Health. Since the hearing of the case the relator produced a teacher's certificate from a private school in the North of Ireland. In deciding the case the Court said:

It does not appear that any examination was ever held by the officers of the college to which the relator was admitted, except a mere conversation. That the college waived this examination will not avail McCandless, as it was a rule of the State Board that his examination should be made. The evidence does not show that the board has ever recognized the Physio-Medical college as being a college of good standing. By an investigation of a committee the board determined the college was not a college of good standing. The relator claims this action deprived him of a property right without due process of law. In the investigation by the board I do not think, however, that a proper action was taken. The evidence shows that the college never had a hearing before the full board, neither was it notified that any investigation was to be made. I think the board went beyond its powers in this regard but, as the relator has not complied with the rules of the board the writ will be denied.

The attorneys for the college announced they would take an appeal from the court's decision to the Supreme Court.

NEWS NOTES.

The roof of Hoesting's store at Alton, Ill., was damaged by fire.

Ferguson's pharmacy, Pittsfield, Ill., was burned out in a large fire on July 26th.

The village of Colonna, Henry County, Ill., was practically wiped out by fire on July 24th. Among the firms burned out was C. W. Reese, a pharmacist.

The Albrecht Hamilton Drug Co. of Peoria, Ill., has dissolved and surrendered its charter.

W. G. Taylor, who looks after the interests of Morrisson, Plummer & Co., on the Pacific coast, has gone back to his field after a lengthy Chicago visit.

Among the recent Illinois incorporations is the Importers' Chemical Company of Chicago. The capital stock is \$10,000, and the incorporators are Frank Draper, Frank F. Douglas and Wm. W. Sheridan.

A general fire at Chenona, Ill., on July 24th destroyed fifty-four houses, among which was the house occupied by Harry Mattocks as a drug store and also that occupied by Rogers pharmacy.

Frank W. Pierce, druggist at Thirty-fifth street and Indiana avenue, was recently sold out by the sheriff to satisfy a judgment of \$626. The stock and fixtures were bid in by John A. Granger, Pierce's brother-in-law.

An old man giving the name of Herman Halter was discovered in the residence of W. L. Church, 190 Cass street, on the 18th ult. He said he was 56 years old, and a druggist by profession. He proved to be an old timer and harmless, so he was not held in custody.

Porter B. Fitzgerald, the ubiquitous credit man for Morrisson, Plummer & Co., has been enjoying his vacation among the northern lakes and returns with some fish stories that paralyze wherever they touch. Mr. Fitzgerald had some detective experience recently and needed recreation.

The fire which destroyed the New York establishment of Fairchild Brothers & Foster made E. H. Buehler of this city hustle for a few days. As Mr. Buehler is western agent for the house, he was compelled to supply the western trade and he had some lively work filling the orders.

The annual convention of the Illinois Pharmaceutical Association will be held in Peoria, August 15 and 16. Frank Fleury, secretary of the association, has been in that city making arrangements for the meeting. The Peoria druggists propose to make it interesting for the visitors.

Chicago companies were recently awarded contracts for furnishing vaccine points to the city in large numbers. The city never required points in such large numbers until the small pox epidemic of last winter, receiving supplies by private purchases at 4½ cents each. The new contracts are for 8 cents.

James W. Plummer, of the firm of Morrisson, Plummer & Co., was recently made the recipient of an unwelcome communication. It was a note from an old friend, James W. Ward, thirty years ago, a prosperous furniture dealer, and one of the pioneer settlers of Chicago. The note was written just before the writer took a fatal dose of laudanum, requesting the disposition of a few effects, concluding with the words, "I am insane and am aware of it."

The Champion Chemical Co. of Springfield of which Dr. A. A. Baker is president and S. E. Baker vice-president and general manager, will soon erect a two-story building, 80 by 100 feet, site not yet selected. The company has leased a suite of rooms in the southeast corner of the fourth floor of the Bushnell building for offices in connection with a couple of salt companies of which S. E. Baker is the manager.

A strange story of loss of memory is told in the disappearance and return of Richard Rawlings, a young drug clerk of Hyde Park. Rawlings retired one Tuesday night

recently and in the morning there was no trace of him. Search was made and his father came from Chattanooga, Tenn., to aid in looking for him. The following Sunday afternoon Assistant Postmaster Hubbard, who is acquainted with Rawlings, met him in front of the post office. Rawlings recognized him only partially and he was sent to Oscar S. Schmidt's pharmacy, Forty-third street and Lake avenue where he was employed. His father met him and the young man was placed in the hands of a physician. He has regained his faculties, but remembers nothing between the time he retired Tuesday night and when he found himself in St. Louis, Friday evening.

NEW ENGLAND NOTES.

A. B. Morgan, who has had charge of the Andrus drug store, Bellows Falls, Vt., has bought a store at Woodstock.

James W. Whitney has gone to Saratoga, N. Y., where he has an engagement as clerk in a drug store in that city.

C. E. Durgin has sold his drug store and business at Winchendon, Mass., to B. R. Day, for several years the head clerk under him there.

Dr. S. T. Thivierge has moved his drug business from his store in Waterboro block, Biddeford, Me., to Dr. N. Thivierge's 77 Main street.

Ernest E. Cross, apothecary, Exchange street, corner of Fore, Portland, Me., made an assignment July 17 to Louville H. Dyer. His liabilities are from \$8,000 to \$10,000.

Lorenzo Stowe of Danbury has contracted to do the mason work on the new Methodist parsonage. The building is being pushed along as rapidly as possible by the firm of Gilbert Bros.

The Ruth Goldsmith Company has been organized at Kittery, Me., for the purpose of manufacturing and dealing in Ruth Goldsmith's Royal Food on infants and invalids and other compounds with \$100,000 capital stock of which \$500 is paid in. The officers are: President, Henry F. Johnson of Newton Highlands, Mass., treasurer, Paul E. Turbel of Newton Highlands, Mass. Certificate approved, July 14, 1894.

P. J. Garvin has purchased of Charles J. English the drug store run by Mr. English so successfully in Bridgeport, Ct., for the past 18 months. Mr. Garvin has had charge of the business during that time and has made many friends during his residence in town, all of whom wish him success as proprietor. Mr. Garvin came from Stamford, his native town, where for seven years he was employed by one firm in the drug business.

A. G. Schlotterbeck, the well-known pharmacist, of Portland, Me., while out riding was run into, but fortunately escaped with slight injuries. He was driving his pair of horses hitched to a large buggy, and when going down the hill near Delano park on the Cape road, he heard a team approaching and before he could get out of the way it came in contact with his carriage and broke the hind axle, throwing both the occupants out. The man in the wagon was called on to stop, but paid no heed and drove on. His companion escaped without an injury, but Mr. Schlotterbeck was cut about the head. His injuries are not of a serious nature.

The Kennebec Ensor Remedy Co., of Gardiner, Me., has filed a certificate of incorporation. Capital stock, \$25,000, paid in, \$1,400. President, O. B. Clason; Treasurer, J. W. Dana. Purpose, the manufacture of the Ensor remedies for the liquor cure in Kennebec county.

A new factor in the drug trade of Saco is the S. S. Mitchell Drug Co., at 80 Main street. The proprietor, S. S. Mitchell, has been in the drug business since 1854, a period of forty years and during that time has established a reputation for reliability honor and integrity, and has gained the confidence of many customers. The store is centrally and conveniently located and customers will receive the most awful attention.

E. C. Frisbie, of the wholesale drug firm of Talcott, Frisbie & Co., Hartford, Conn., completed arrangements before he sailed for Europe in the spring for a family monument to be erected at Cedar Hill in remembrance of himself and the late Isaac E. Frisbie, who was one of the best known residents of the city at the time of his death here some years ago. The monument, which has just been erected on one of the principal avenues at Cedar Hill, is of the finest Westerly granite and is beautifully cut and polished. The base is six feet square, and the entire height, including a shaft twenty feet in length, is twenty-nine feet. The color of the material is exquisite and the monument has attracted a great deal of attention since it was placed in position a few days ago. The inscriptions have not yet been cut in the stone. Isaac E. Frisbie, who will be commemorated by the monument, was the father of ex-Alderman Frisbie, and was the owner of the handsome residence and grounds on Collins street now occupied by the ex-alderman. The monument was designed by General George M. Redway of Hartford, who has acted under Mr. Frisbie's directions from the outset. As soon as Mr. Frisbie returned from Europe a few weeks ago, he visited Westerly with Mr. Redway and gave orders to have the monument taken to Cedar Hill immediately.

Pharmacy in the Maine State College.

Thomas J. Stevens of Portland has written to the *Portland Press* regarding the tabling of the resolutions at the annual meeting of the Maine Pharmaceutical Association, approving the establishment of a course in pharmacy at the Maine State College. He says it was doubtless largely due to lack of knowledge of the college and its designs, and not more than half a dozen members present knew anything about it or the resolutions until they were introduced and were wholly unprepared to act for or against them.

Had they more fully understood it and given it more thought, it would, no doubt, have passed by a large majority. But when members from Brunswick oppose and vote against the resolutions because they think Bowdoin is the place for a college of pharmacy, if there is to be one, and Portland druggists do the same because Portland is the business centre and ought to have it, it looks as though local prejudice had to do with tabling those resolutions.

There can be no reasonable objections to Bowdoin having a college of pharmacy if she wants it, or Portland if she can get the money to build and equip her laboratories and pay her professors, and it would be quite the proper thing for the Pharmaceutical Association to pass reso-

lutions favoring them. The State college is maintained at public expense for the public good, and our boys can attend school at Orono a whole year for less than the instruction fees at the Philadelphia College of Pharmacy.

Two thousand dollars yearly for a professor in the theory and practice of pharmacy would complete the teaching force at the State college.

In regard to the objection that pharmacists would be ground out by the wholesale, implying that quantity in this case would mean lack of quality, there can be no force in that. The graduates at the State College will have to pass the examination like anybody else.

Auction Sale of Prescriptions.

The stock of drugs and about 115,000 prescriptions, which were recently kept in the Newport store of Hazard, Hazard & Co., were sold July 19, at sheriff's sale under a judgment of the Supreme Court, in favor of John R. Caswell, for \$27,898. There were only two bidders; Mr. Caswell and William H. Stratford. The figure was run up by them to \$2,250, each bidding as if he purposed to own the property at any price. Finally, Mr. Stratford desisted, and Auctioneer Burlingham knocked the goods down at \$2,300 to Mr. Caswell. The prescriptions are especially valuable, which accounts for the high figure.

Who is The Plagiarist?

According to *Current Literature* Beer-bohm Tree, the English actor, is said to have received the following letter:

"Venerated Sir—I wish to go on the stage, and I would like to join your theater. I have been a bricklayer for five years, but having failed, I have decided to take to acting, it being easier work. I am not young, but am six feet without my boots. I have studied 'Bell's Election,' and am fond of late hours."

In its initial number the *Indiana Medical Epitomist* printed the letter given below, with the explanatory remark that "It emanates from an individual who would probably make a desirable student for Professor Josiah Adams, M.D., of the Curtis-Physio-Medical College, of Indianapolis:

INDIANAPOLIS, Ind., June 10, 1894.
VENERED SIR.—I want to be a doctor and would like to study by you. I have been a street car driver, but have lost my job, and would like to practice medicine as it aint such hard work. I am forty years old and six foot two inches high, and way 150 pounds. I have studied "Old Doctor Ward's Private Counciler and Guide to Health" and I like to keep late hours. Please answer.

Yours, &c. ZIMRI SKAGGS.
General Delivery, Post Office.

Is the *Medical Epitomist* seeking to divert attention from the real condition of affairs in its "fair land of freedom"? or does a manufactory exist for the production of choice letters of this kind?

A Hoosier Editor and his Suffering Family.

Journals with coupons are all the rage now. Everyone has 'em. Here is ours: CUT THIS OUT.

THIS COUPON, accompanied by \$1 in cash will entitle the sender to the INDIANA PHARMACIST for one year.

It will also enable the Editor to purchase one small roast of beef for his suffering family.

NOW is the time to subscribe.

—*Indiana Pharmacist*.

STRAY NEW YORK NOTES.

J. P. Jones who represents Sharp & Dohme in New York State spent his vacation in Catonsville, Md.

Henry Allen the well-known dealer in druggists' glassware and sundries has returned to the city from a short stay in Europe.

John S. Sprague the general southern representative of Sharp & Dohme has returned from a short vacation and is now on his way to Norfolk, Va., and the south.

Benj. L. Hume of the Empire Syringe Co., this city, has secured the agency of the Chicago and Western Soap Works for their Crème de la Crème Complexion Soap.

Sharp & Dohme's "Ideal" Menthol Inhalers are meeting with a rapid sale in this city. The new inhalers are unique in design, reasonable in price, and afford a good profit to retailers.

J. B. S. McIntosh one of the partners of Craighill & Co., the Lynchburg firm of wholesale druggists and special representative of Sharp & Dohme in Virginia is spending a few days in New York on business.

G. Edgar Bird with J. B. Freese so well-known to New Yorkers as the Sixth avenue "Druggist and Botanist" has just returned from a vacation spent with his brother in Toronto, Canada. He considers himself lucky to have escaped one of New York's hottest weeks.

The house committee on agriculture has ordered favorable reports on the bill of Mr. Hatch to prevent the adulteration and misbranding of food and drugs. The "pure food" bill prohibits the introduction into any State or Territory, from any other State or Territory, or from a foreign country, any article of food or drugs which is adulterated or misbranded.

Robert A. Lee, the busy apothecary of the New York Polyclinic makes his home in Flushing, L. I. where he occupies a fine old villa residence of Queen Anne design. Mr. Lee is not the only New York druggist who has selected Flushing as a place of residence, many well-known members of the profession, who can afford to leave their places of business during the night, taking advantage of the convenient railroad schedules to make the daily trip. The well-known figure of O. J. Griffin, clerk of the New York College of Pharmacy, may be seen crossing the ferry daily.

John W. Ferrier the manager of J. N. Hegeman & Co.'s "Theater Pharmacy" at Broadway and 30th street, tells a singular tale of how a Second avenue pharmacy changed ownership and proprietor and clerk reversed rôles, the proprietor selling out to his clerk who retained his former employer in the position formerly occupied by himself and at the same salary. The proprietor it seems was financially embarrassed and had arranged to dispose of the stock and good will of his store to a third party, who, however, failed to keep his appointment. At this juncture the clerk came forward with an offer for the store which was accepted and a deed of sale was speedily made out. After the transaction was completed, the quondam proprietor expressed his intention of looking out for fresh employment, and the clerk, now proprietor, magnanimously offered him the position which he himself had filled. This was agreed to and the customers of that store are now treated to the spectacle of clerk and proprietor playing in reversed rôles.

Mr. Stoffregen the general manager of Sharp & Dohme's New York offices is stopping at the Peninsula Hotel, Seabright N. J., for the summer. Louis Dohme of the firm paid a flying trip to the city this week.

FOREIGN NEWS NOTES.

The Society of Chemical Industry at its recent annual meeting elected Alfred H. Mason, of New York, chairman of the New York section.

The exhibit at the annual meeting of the German Apothecaries' Society which was held not long since in Cassel is said to have been particularly handsome and interesting. Among the exhibits of special interest were two complete full-sized drug stores showing in every detail the most excellent workmanship as regards fixtures, etc.

The annual meeting of the German naturalists and physicians will be held in Vienna from September 24 to 30 of this year. Among the twenty-six papers which have already been promised for the pharmaceutical section of the meeting, are contributions from Schmidt, Tschirsch, Dieterich, Joller, Thoms Van Waldheim and other very prominent German scientists.

Two cases of traumatic tetanus were treated recently in Vienna with Tizzoni's tetanus antitoxin and recovery followed. The treatment required four bottles of the antitoxin, each of which cost 90 marks, making the cost of the medicine 360 marks or \$90. In purchasing power, owing to the difference in the values in the two countries, \$180 would more nearly represent the amount in American money than would \$90.

Notice has been issued to the pharmacists of Vienna that the legal regulations as to the sale of brandy must be strictly observed. It has been reported that these regulations have been flagrantly violated by at least one Viennese apothecary. Under the Vienna excise law, brandy, in quantities of one litre (about one quart) or over, may be sold without restriction. It may not be sold in smaller quantities, save on the order, either written or verbal, of a physician.

The General Pharmaceutical council of Holland convened in Rotterdam on June 27th and 28th. The total membership of the Council is 414 regular members and 18 honorary members. Owing to illness Van Ledden Hulsebosh resigned his office as secretary during the year. The officers elected were: President Dr. H. Wefers, of Bettink, Utrecht; vice-president, Dr. P. A. Vos, of Rotterdam, and general secretary, G. B. Schmidt, of Amsterdam. Prof. Raoul Pictet delivered a lecture on the significance of low temperature in physics and chemistry, illustrating it by numerous startling experiments.

The police department of Berlin have issued very stringent regulations concerning the use of the heat from steam kettles for drying purposes. When the pressure maintained is equivalent to six atmospheres or more, it is forbidden to have drying direct above the kettles. The whole construction must be carried out under regulations laid down by the police.

Alas, how are the mighty fallen from their estate! How can the haughty German Apotheker accustomed to sneer at the "drug store" of Kansas, ever hold up his head! The following paragraph or rather its German equivalent went the rounds of the provincial newspapers of the Rhine district. "In Stendal, the local physician was recently compelled to close up the

Eagle pharmacy because both the assistants were completely intoxicated and the pharmacist himself was absent. Before the store was closed up numerous errors had been made in dispensing medicines, one pedestrian who had walked his feet sore having been giving Hamburg plaster in lieu of deer's tallow." It is naturally with extreme sorrow that the *Apotheker Zeitung* confirms the accuracy of the report.

Physicians of the Dr. Robertson type fare badly in Germany. On a June morning to Dr. Brinkmann of Neutomischel came Mrs. L., wife of a neighboring physician. Mrs. L., while awaiting the coming of Dr. Brinkmann, took occasion to relieve her mind by confiding to the doctor's parlor maid that her husband had "misshandled her with a key," and gave the same information to other persons. As the worthy "physiker" and his good wife gossiped on their doorstep in the evening, a neighbor queried of Dr. Brinkmann as to the truth of the rumor that Mrs. Dr. L. had been sore belabored by her "worthy man," as the German *hausfrau* terms her husband. To which Dr. Brinkmann gave answer that Mrs. Dr. L. had scarcely a whole spot on her body, which confirmation of popular "rumor" (for it was an open secret that Dr. L. was won't to belabor his wife when time hung heavy on his hands) gave additional zest to the rumor. These facts being set before the judge, he fined the gossip Dr. Brinkmann in the sum of fifty marks, or about thirteen dollars, with five days' imprisonment. The defense showed the main facts of the case to have been matter of common knowledge, but the learned judge held that the report was merely rumor until it received the circumstantial confirmation given by the physician, and that this confirmation constituted a breach of professional confidence.

Pharmacy at Gibraltar.*

By S. M. BURROUGHS.

Pharmacy is well represented at Gibraltar, and I doubt if there is any town of 23,000 inhabitants in Europe which has so many well stocked pharmacies, and which do so extensive a trade. The town is very healthy, the death-rate at the present time being only 16 per 1,000. This is owing to a remarkably salubrious climate and improved public sanitation.

The streets are as clean as in the best regulated cities, with pavements that London and Paris would be proud of. They would not, however, be proud of the formation of the principal street, which is much narrower in places than is necessary. Those who are engaged in the "vacant lot industry," are the chief barriers to widening and straightening the streets; they hold out for high compensation in the absence of taxation to their "industry."

The main street, near Mr. Roberts's pharmacy, is thus barely wide enough for two carriages to pass, while the side walk is narrowed to the width of the kerbstone, where the walls of a vacant lot crowd upon the footpath.

The pharmacy occupies the entire ground floor of one of the best buildings in Gibraltar, erected on Government land by the founder of the pharmacy, Dr. Roberts, whose son has so worthily succeeded that pioneer of medicine and pharmacy at "The Rock." The pharmacy is as thoroughly English as if built and con-

ducted in the "Home" country. There are the large ornamental jars in the window, the long counter and show-cases filled with all the good things to be found in a chemist's shop in England, with handsome tablets and show-cards of the leading English manufactures. At the side of the pharmacy is a fine garden—now blossoming out with roses, trumpet lilies, Cape aloes and geraniums, fragrant with heliotrope, cistus and eucalyptus, and shaded with large palms, pepper-trees, and acacias.

Mr. Roberts has, as a family relic, the indentures of his father, who served his apprenticeship to a Gibraltar doctor. The doctor promises to teach his pupil all the knowledge and art which he possesses, and his pupil is bound, among other things, not to be out later than nine o'clock in the evening.

The ancient massive city gates, of stone, are a few rods down the street, bearing the Spanish and Moorish arms, as well as those of their successors. There is also preserved in a wall near by, a still more ancient Moorish gateway of beautiful design in stone-carving.

The adjacent lofty stone walls are partly covered with the wide-spreading ivy, vine, and the large purple blossoms of the Bourgainville creeper making the walls look peaceful and beautiful, and almost stop the mouths of the cannon.

The art of peace has replaced that of war also in the most, for the water is drained away, and there is a wide garden following the angles of the redoubts, where, sheltered from the wind and enjoying the morning sun, are large yellow and white roses, and golden cistus, with borders of red-blossomed Cape aloes and geraniums. The small branches of the almond trees are covered now with pink blossoms, and blue periwinkles peer from thick masses of glossy foliage. The sago palm and the date palm lift high their graceful plumage, and clusters of half-ripened fruit before the embrasures at the top of the walls, like Nature's arbiters for peace; for these, with the tall eucalyptus trees, would prevent the gunners from taking aim.

The garrison are safe enough, for Gibraltar is practically impregnable, with a perpendicular rock of 1,500 feet on the land side, and granite walls within walls and moats toward the sea and harbor.

Roberts' pharmacy is one of the parent institutions of Gibraltar, and Mr. Roberts is a prominent public man in Gibraltar and a Provincial Grand Master in the Masonic fraternity, where, as in private life, he is esteemed by all for his kindly interest in promoting the general goodwill and well-being of the community.

Large and varied stocks of goods are necessarily kept, for Gibraltar is an important trade-center, not only for Europeans, but for the world. Every important nation has its consulate at Gibraltar, and Norway and Sweden, though under the same government, have separate consuls.

The number of Norwegian vessels and seamen visiting Gibraltar is greater than those of any country of similar size and population. Most of the naval ships in the world are likely at one time or another to call at "Gib," and two years since, during the rebellion near Tangier, large fleets from England, France, Spain, Germany and Italy found anchorage in one port or the other. The harbor of Gibraltar is protected by its huge rock from east winds, and Tangier by its hills and mountains from the west. As they are only thirty miles apart, a safe anchorage can be found in one or the other in any weather. Among the lines of steamers

*The Chemist and Druggist.

calling at Gibraltar are the P. & O. Orient, German Lloyd's, and Hamburg-American, the Florio (Italian), Messageries Maritimes (French), and several Spanish and other lines.

The Gibraltar pharmacist has customers, therefore, from the ends of the earth, as well as among his fellow townsmen, of varied nationalities.

In the same day or hour there may be in the pharmacy, English residents and travelers asking for any of their favorite medicines or toilet articles or a dozen Americans at a time from the steamers, wanting supplies of wintergreen tooth powder, sozodont, distilled witch hazel, Ayer's or Hood's sarsaparilla and little liver pills, or with prescriptions for the compressed and other handy forms of medicine so much in vogue in the States. The Frenchman will have his medicines and toilet preparations with the talismanic address, "Paris," upon them. I observed this years ago in New Orleans among the Creoles, the descendants of the early French settlers in Louisiana, before it was ceded to the States. Some of them are the children of Acadians expatriated from Canada on its conquest by the English. The French pharmacies of New Orleans were supplying French specialties to the third and fourth generation—to people who had never been to France, but had imbibed from their ancestors a belief that no doctors were so scientific as those with the M.D. of Paris, and no pharmaceutical preparations so elegant and reliable as those from La Belle France. That there is reason for this prejudice may be conceded. It was French savants who discovered many of the most valuable alkaloids, and French pharmacists were the first to prepare pepsin, sugar-coated pills, gelatin capsules, dialysed iron, jujubes containing gelatin, and such elegant liquids as Aubergier's syrup of lactucarium, and various preparations of beef, iron, quinine, etc.

The French protective system has secured to local manufacturers the home market, but the active competition in free trade England is securing for London a good share of the increase in export trade, which was once monopolised by Paris.

Although there is a large Spanish population in Gibraltar, but few Spanish chemical and pharmaceutical goods are sold. The high cost of materials in Spain, owing to an exorbitant tariff, makes goods so dear that Spanish manufacturers cannot compete with English goods abroad, and barely do so in their own country.

The water supply of Gibraltar is entirely dependent on the rains. The water is stowed in large cisterns which are cleaned regularly. Salt water is used for sprinkling the streets, and the drains are also flushed with salt water three times a day.

This season has been unusually dry, with only about 16 ins. to date. At the same time, two years ago, while I was there, we used to have a downpour nearly every day, and the rainfall from January to April 1 was 50 inches.

Among other popular pharmacies in Gibraltar are those of Patron, Garibaldia, Dr. Triay, and others all of them, by the way, subscribers to *The Chemist and Druggist*, in which they manifest the greatest interest both as regards its literary and its advertising sections.

The American Musk-Rat.

An interviewer of the New York *Sun*, who had acquired some vague notions concerning musk, and thought that a

sketch of the commercial history of that drug would make good copy, dropped into the first drug store on his way in search of information. The druggist was evidently a match for the *Sun* man, and promptly told him a tale of the growth of a new home industry in musk, which must have set the readers of the *Sun* wondering at the marvels of their native land next morning.

"As to musk now," was how the literary *Sun* man commenced his inquiries, "I daresay that the race of fragile but aromatic little deer from which musk is obtained must be nearly extinct by this time, is it not?"

"Well," replied the frank druggist, "It is not the fragile and aromatic little deer that furnishes the musk I sell. That fragile and aromatic little deer isn't any nearer extinction now than he was when he first began to dive and burrow, and that was way back in the pristine years."

"Why," exclaimed the *Sun* man, "doesn't the animal that supplies the musk of commerce live among the palm-clad hills of Central Asia, where picturesque native hunters follow its tiny track, risking their lives and undergoing great toil and hardship to secure the almost infinitesimal sac which envelops the precious perfume, and by painful journeys of miles and miles bearing it to the marts of trade, where it is sold for many times its weight in gold?"

"Yes," replied the druggist, "I've heard of that. But the way I find the facts is different. The animal that supplies the musk of commerce around these parts lives largely in those luxuriant realms of bog and malaria known as the Jersey marshes, and I never knew the following of its trail to be attended with much of anything but a jug of rum and a long-handled spear. The hunters are picturesque, though. An old fur cap, a large chew of tobacco oozing over an unprotesting red goatee, a pair of india-rubber boots, filled with the legs of hickory overalls, and a long lank Jerseyman—that ought to pass for picturesque, hadn't it? But none of these hunters ever said anything to me about an infinitesimal sac enveloping precious perfume, nor even complained about having to journey many painful miles and miles to reach the marts of trade, nor have I any recollection of their demanding many times its weight in gold for the precious perfume. Not any hunters that I ever dealt with. They just jumped aboard a ferryboat, landed on this side, hoofed it up here, and, chucking on the counter what they had to sell, said:

"There ye be, cap'n! Didn't hev much luck yister'd'y, an' only slashed the pods out o'ten. They're good uns, though. O't to be wuth 10c. a pair, cap'n."

"Yes," continued the druggist, "those picturesque hunters who risk their lives on the trail of the musk-deer in Central Asia mountains can do better by packing their grips and coming over here and chasing the wily musk-rat on the Jersey marshes. They might have to wear more clothes, but they'd get more musk and find a market right under their noses. Yes, my son. The effete orient is no place for the musk-hunter nowadays. The robust occident beckons him and he had better come. He needn't fetch his spear with him. He can get one here for 50c."

"But," insisted the seeker after information, "surely somebody sells the genuine oriental musk yet."

"Yes—oh, yes," replied the frank druggist. "There's a great deal of it sold yet, but it's all nonsense. What's the use? A

drop of Jersey musk will reach just as far and last just as long as a drop of the most aristocratic article that ever came from Asia. A lady carrying a drop of the imported musk to church with her will not make her neighbors a bit sicker than if she had insinuated some of the home-grown stuff into her garments. Neither will the high-collared youth who sits down next you at the theater. Then I say, what's the use? There ain't any. No one can tell the difference, and I keep the home article. Some of the finest and most delicate colognes I sell to day get their pungency from the aromatic secretion of the musk-rat of the Jersey marshes. I mention myself, but if I should place one hundred New York druggists in a bunch and let you chuck a stone at the bunch, you couldn't hit a man that doesn't have just as intimate relations with the Jersey musk-rat as I have."

"Then," said the information-seeker, "the Jerseymen who hunt the musk-rat must make a nice thing out of it."

"As far as it goes, yes," replied the druggist. "But as ten or a dozen pair of musk-rat pods will make enough extract to last a year in any drug-store with a fair trade in perfumes, there might be more money in it for the hunters than there is. But then, you see, the musk-pod isn't all there is to the musk-rat. He is an animal of great resources, the musk-rat is. For instance, he furnishes the material from which many thousands of sealskin caps, gloves, muffs, and trimmings are made; and he is, to a large extent, the rabbit-stew of the cheap restaurant. So you can readily see that neither the musk-deer, the seal, nor the rabbit will be extinct so long as the great American musk-rat lives, moves, and has his being."

A Compound Glass.

The new German glass is a new and singular departure in that line, disregarding as it does the ordinary principle that good glass must contain, together with silica and a divalent or trivalent metallic oxide, the oxide of a monovalent metal—an alkali metal or thallium—but while thus free from alkali can be worked before the blowpipe, and has a small coefficient of expansion. The inventor was led to the production of this compound glass by studying the state of strain in ordinary glass vessels and tubes cooled in contact with air. As a hollow glass vessel, cooled in contact with the air, has its outer skin in a state of compression, while the inside is in a state of tension, it is easily damaged on the inside, but is resistant on the outside; a hollow glass vessel, if introduced when cold, into warm air, has its outer skin thrown into a state of compression, but if, when it is hot, it is exposed to cold air, its outer skin is thrown into a state of tension—this being the reason why cold air causes glass to crack more readily than hot air does. The inventor succeeded in throwing the outer layer into a permanent state of compression by covering the glass vessel with a thin outer layer of glass which has a small coefficient of expansion. The flasks made of such glass can be filled with boiling aniline and immediately sprinkled on the outside with cold water—glass dishes, too, can be heated over the naked Bunsen flame without cracking. Pressure tubes of this compound glass are also made to meet all the requirements of practice, and have been kept in continuous use on locomotives for five months.

Soda Water and the Newspapers.

Never in the history of the trade has the subject of soda water occupied so large a share of the attention of the newspaper writer as now. From various sources we gather the following.

NERVES AND SODA WATER.

[The Chicago Times.]

"Nervousness seems to be a fad just now," said the man behind the soda water bar. "Half the trade is from persons who think they need something to 'pick them up.' First it's phosphate, then bromide in some form, and then something stronger. I don't know where the craze will end. The soda fountain has already become a bar for mixed drinks and a prescription counter where every customer is his own doctor. I guess the next improvement will be a nickel-in-the-slot attachment for pulling teeth while you wait."

"You needn't quote me as saying so," the loquacious mixologist went on, "but it's a fact that must be apparent to everyone that the soda water fountain is rapidly becoming a menace and a nuisance. It's a good cheap affair for a young spoon to march his best girl up to on a hot summer night; it's less expensive than the ice cream table, and therefore it is an economical device, but it gets men, women and children into the habit of drinking all sorts of villainous decoctions about the effect of which they know nothing and which they don't need at all."

"I don't mind serving ice cream soda to a bevy of pretty girls, for that is a harmless sort of beverage and the girls are generally kittenish enough to give the service a certain amount of interest, but when your hypochondriac comes in—the fellow who is blessed with perfect health—who doesn't know that he's got a stomach except when he's hungry—who knows about liver only as something that goes with bacon, and about kidneys only as viands, nicest when they're broiled—when such a man comes in and studies out something he has not yet tried, why then I want to go back to Iowa."

With that awful thought in his mind the egg-shaker gave the marble counter a swipe with a towel and sent drops of Waukesha water flying all over the chewing gum.

MEDICINAL SODA WATER.

"The worst feature of the business, though," he said, returning to the attack, "is the medicinal end of it. Men want bromo-this and bromo-that and some ask for quinine and others bicarbonate of soda; some get whiskey, and I have a regular cod-liver oil patron. Another man wants pepsin in his, and peppermint is common enough. Plenty of them come to the soda water clerk as if he were a doctor and ask for something for ills, real or imaginary, of which they may or may not be 'seized,' or 'possessed,' as I have heard a lawyer friend of mine say."

"You wouldn't believe it," the drug store toddy-tosser continued, after fixing a raspberry phosphate, "but men and women too, come here and ask for poisons. One chloroform drunkard drops in regularly to try to persuade me to give him a drink, and a woman who lives near here comes frequently after laudanum in hers. One chap staggered me by asking for some bromo-hyoscine, a drug I had never heard of, and I kept a drug store in Des Moines till I got caught at it."

"I looked up bromo-hyoscine and found that one-hundredth of a grain is enough to put a man so sound asleep that a checker-

board suit wouldn't waken him. He didn't get his medicine. Guess he wanted to shuffle off."

The dispensing chemist sidled up to the other end of the bar, served a lemonade glassful of the citrate of magnesia, and swabbed up the counter on his way back to the cracker-bowl—for this soda water bar had a free lunch—"wafers" or "biscuits," instead of dirty crackers and much fingered cheese.

SELF MEDICATION.

"That's the worst feature of the trade," he began again: "the prescribing for—self feature. I used to think, when—patent medicines were my chief stock in trade, that the dear people were dosing themselves into early graves—making themselves 'brainless as chimpanzees, meager as lizards'—but I think now that the crowning glory of American foolishness is the so-called soda water fountain. Young people get into bad and extravagant habits patronizing the soft drink bars, and older people—business men, who ought to have better sense—come tumbling in here for a brace up on drugs half a dozen times a day, when all they need is as much exercise as is contained in a walk around the block."

"The soda fountain, or liquid drug fountain, is a first cousin to the office lounge," said the ex-lowan, as he polished a glass after swallowing a lemon phosphate. "There are more lounges in offices now than ever before. The professional man becomes tired, his eyes 'swim' and his head aches. He lies down for a few minutes and thinks he is all right again, and resumes work worse than before his rest, for he has to make a greater effort to pick up the thread where he dropped it. If he doesn't lie down he runs out to the soda fountain, gulps anything he happens to think of and goes back refreshed, after the faith cure idea of refreshment. That is, he thinks he is refreshed when he isn't. That's why I say the lounge and the fountain are related. Take a little something before you go?"

"No? Oh, this won't hurt you. It's only wild cherry with a little phosphate in it, and there isn't enough prussic acid in the cherry to hurt anybody."

"Growing? Yes, it's growing. In fact, it's the pot-boiler of all down-town drug stores. Hot drinks in winter and iced drinks in summer! Buy a big fountain, throw away the key of the door, keep open day and night, cut prices on regular trade and your fortune is made. Sell cigarettes and nerve tonics, and you can keep Coney's army supplied with cranks. Keeping a soda water fountain is about on a level with running a hotel in a resort for consumptives."

GAMBLING WITH THE DIRECTORY.

[The Chicago Record.]

There is gambling in Chicago; no doubt of it. Three buds of promise in summer gowns came fluttering into a west side drugstore and went to the soda water fountain as if by instinct.

"Will you let us have the directory, please," said one of them.

The bulky volume was laid before her. "Now, girls, remember, the last figure counts, right-hand page, and each one gets three cuts. I'll begin."

She opened the book and said "Oh-h-h," while the two giggled with delight. The page was 1,708.

"Put down three there," said she. Another cut brought 467.

"That makes 10. Now I get another.

Good! That's 5 more. Fifteen isn't bad."

The second girl opened at 269, so that 9 was her first count. Next time she "cut" 8 and the last number was 7, making her, as she observed, "high man."

The third one began with 76, added 5, and collapsed on the third trial, for the right-hand page was 1,451.

"I'm stuck," she said with the philosophic air of a thorough sport. She began to rummage in her purse, and the highly entertained drug clerk drew three chocolate ice creams."

He observed, after the girls departed: "That's the first time I ever knew the city directory was a gambling implement."

JUST OLD-FASHIONED SODA WATER.

[Washington Star.]

He read the signs with the various alluring names which were displayed on and about the soda water fountain. He was visibly impressed with the elegant combinations of syllables and the suggestions of refined luxury which they implied by their very sound.

"What'll ye have?" asked the youth in the white coat.

"This business hez advanced a good deal since I wus in town last," he said reflectively, as he laid his carpet sack down and put his foot on it.

"Yes. We keep up with the times on fancy drinks. What's yours?"

"I dunno whether ye've got any of wut I want er not," he went on, in an apologetic way.

"Well, let me know what it is, and if we have none, we'll send out and get it."

"I hain't seen nobody drinkin' it, an' I don't see no advertisement of it in yer shop."

"Well, tell me what it is, and I'll do my best. You're keeping people waiting."

"Oh! Excuse! What I came arter wus a glass o' soda water. Jes' common soda water. But ef ye don't keep it, gimme suthin' that's like it ez near'z ye kin, an' we'll call it square."

WHAT'LL YOU HAVE TO DRINK?

[Detroit Tribune.]

What'll you have?

Here are the names of some of the new drinks: Egg chocolate, egg phosphate, egg calisaya, egg cocoa, egg lactart, egg vichy, cherry and egg, goldenade, pineapple smash, queen's favorite, coffee naug, clarique, egg coffee, yaborra cream, royal cabinet, Boston deception, silverade, mountain cream, Rocky Mountain goat, yum yum, undertaker's friend.

Soda fountain drinks have become so involved and complex that special barkeepers are required to look after them. A soda barkeeper is looked upon with disgust by the saloon barmen. He is considered a little yellow dog. This is manifestly unfair. He is usually a good, decent enough sort of chap who waits on the pretty girls with a sunny smile. Wages? Some soda barkeepers get as high as \$4 a day. But the season is short and he has to find something else to do in winter. This, however, is the period of his harvest. What's yours?

STUDENTS AND SODA WATER.

[New York Recorder.]

A Cambridge, Mass., drug store displays the sign: "Come in, girls, and get your ice cream soda. The students are all away." This hint that the society of Harvard men is objectionable is as much of a shock as is the intimation that "the fast set" paints the town red with raspberry flavor.

WINKS DON'T GO NOW.

[Manchester (N. H.) Union.]

The man behind the soda fountain may tell you that nervousness seems to be a fad just now, and that half the trade is from persons who think they need something to brace them up. First its phosphate, then bromide in some form, and then—but they can't get anything stronger at the soda fountains now. Times are not like they were before the police commission came in.

WHEN WINKS DID GO.

What's that? Oh, yes, that's where the wink came in, you know, but there's no use for winks now at the soda fountain. The wink is a back number; it doesn't cut any ice, as it were.

What! Did women ever call for anything strong at soda fountains? Bless you, yes. Not a few women, either. Why I know one or two soda fountains that had a regular list of customers among the fair sex, but the soda men generally put in plenty of soda and little of the strong water. Just enough, you know, to give the drink a little tone.

You can't tell where the craze will end. Every customer at soda fountains is his own doctor, but the strong waters will not figure in the prescription to any extent now-a-days.

The fellow who can't drink anything but warm water or milk on account of his dyspepsia, liver, or some other internal machinery, will tell you that the soda fountain is becoming a menace and a nuisance, but he's pessimistic, you know. He says it's a good cheap affair for a spoon to march his best girl up to on a hot summer night; it's less expensive than the ice cream table, and therefore, it is an economical device, but it gets men, women and children into the habit of drinking all sorts of villainous decoctions about the effect of which they know nothing, and which they don't need at all.

ICE CREAM SODA.

Beg pardon, I'm getting loose from my trolley. No; ice cream soda is not so popular in Manchester as in some other places, but it is sold here. Yes, girls mostly. You see they get a pretty fair hunk of ice cream, and with the soda they get two treats in one. Well no, of course the young man settles generally, but occasionally the dear girls blow themselves in for a treat. Lots of times, though, when two or more girls go in for a cream soda or the other kind, they each pay for their own, and do a lot of giggling over it, too. Of course the ice cream soda man doesn't mind serving soda to a bevy of pretty girls—if I weren't married I wouldn't mind it myself—for that is a harmless sort of beverage and the girls are generally kittenish enough to give the service a certain amount of interest, but when your hypochondriac comes in—the fellow who is blessed with perfect health—who doesn't know that he's got a stomach except when he's hungry—who knows about liver only as something that goes with bacon, and about kidneys only as viands nicest when they're broiled—when such a man comes in and studies out something he has not yet tried, why, then, the soda man isn't happy. [Is this unconscionable plagiarism?]

And would you believe it?—but then it doesn't make any difference whether you do or not—There's one soda fountain on Elm street that has a regular cod liver oil patron. Now that's the funniest thing, and there's another man who wants pepper sprinkled in his. Something's the matter with his digestive apparatus, I guess. Peppermint is common.

Men and women sometimes chance up soda fountains for poison. Chloroform takers drop in occasionally and try to induce the soda man to mix a little in the drink, and it is not an unusual thing for a customer to attempt to get a drop or so of laudanum in theirs, but it is useless for people to try to work the soda man in this way. He won't have it.

A PESSIMISTS' VIEW.

The pessimist will also tell you that the dear people are dosing themselves into early graves making themselves brainless as chimpanzees, meager as lizards. He might also insinuate that the people get into bad and extravagant habits patronizing these soda fountains, and older people—business men who ought to have better sense—come tumbling in for a brace-up half a dozen times a day, when all they need is as much exercise as is contained in a walk around the block.

Growing? Yes, it's growing. In fact it's the pot-boiler of all the drug stores. Hot drinks in winter and iced drinks in summer! Buy a big fountain, throw away the key of the front door, keep open day and night, cut prices on regular trade and your fortune is made. Sell cigarettes and nerve tonics and you can keep Coxe's army supplied with cranks.

What are the popular drinks in Manchester? Well, now, I'm not posted particularly. There's cherry with phosphate; business men affect this a great deal. Phosphate is popular all around. Then there's Moxie. Girls will call for the funniest mixture of syrups, as many as five or six kinds, sometimes. Orange phosphate is great stuff. London shrub, ginger ale, birch beer, vichy, coca cola—the boys go a heap on coca cola. Well, there's lots of others, but I haven't time to tell you of them. So long. I'm going over across the river—I don't care much for soda water myself.

some grocery stores. It is the first time an inspector has ever examined the druggists, and some of them did not like the idea, but the result shows that they needed looking after and that they have at least been very careless. In some cases the druggists must have known their weights and measures were wrong, but in most of the cases I think it was due to their carelessness and ignorance. Take a small weight like a grain, and a few years' use will change it considerably. In some cases I found the weights too heavy on account of the dirt on them. Besides these weights that I confiscated I filled a number of weights—that is, unscrewed the tops, they are hollow and partly filled with shot, and put enough shot in them to make them right. If I should find any of them short on my next round I will have those using them arrested. They should be arrested now, I think, for there is no excuse for making or having such a weight short, but I let them go with a warning.

"I will visit every drug store in the city, and next year it will not be so bad. But in a business requiring such accuracy as the drug business the weights should be tested frequently and those which wear rapidly should not be used over a year. Some of the druggists are perfectly innocent in the matter and almost all of them I think want their medicine weights and measures to be correct. The only way to know that they are so is to test them, for the makers will not guarantee them. Some that I confiscated had only been in use a few days and had not been tampered with in any way."

The New Trade Mark of the Southern Railway.

The Southern Railway has adopted its trade mark and takes its place among the railroad companies of the American continent in the matter of heraldry.

The design of the trade mark is unique and pretty and has just been accepted, having been submitted to the consideration of the management some time ago with a number of designs.

The Southern will have for its trade mark simply an "S" and "R" with the arrow of the old Richmond and Danville running through them.

It is a striking emblem, representing the swift flight of the trains of the famous Piedmont Air Line and the directness of the route. The arrow is synonymous for all this and the letters tell the name of the company—the Southern Railway.

The arrow in the design represents all that is characteristic of the famous Piedmont Air Line—speed, directness, comfort and pleasure.

The interest in the trade mark manifested outside of the management was expressed by an unknown poet who mailed to the passenger department a few days ago the following verses commenting upon the new ensign:

An arrow flying East
Does not in the least,
Show a sign or indication
Of a Southern destination,
But an arrow headed down
Will strike most any town
Of any note or size
In the land of "Summer Skies."

MORAL.

When you journey South by rail
To reach a balmy clime,
Take the line that will not fail
To put you through on time
And the one that's sure to suit
Is the "Southern Railway" route!

Inspection of Druggists' Weights and Measures.

The inspector of weights called on the druggists of Omaha recently and inspected their weights and measures.

First the druggists were surprised, and then the dealers in druggists' weights and measures were surprised—the former disagreeably, the latter agreeably. Inspector White caused all the trouble by starting out a few days ago on a tour of the drug stores. It was the first day they had ever been visited by such an official, and some of them protested against Mr. White going behind their counters and investigating their business. But he did so just the same, and will continue doing so until he has visited every drug store in the city.

In only two of the first twelve drug stores visited, were all the weights and measures found to be correct, and Mr. White, in consequence, has a job lot of "druggists' shorts" in his office. Most of the weights confiscated were small ones, drams, scruples and grains, but a number of ounce and pound weights were also found to be short. Many of the weights had been in use for years and had worn short; others were made short. One eight-ounce graduate confiscated, only measured seven ounces, and a number of others were short or wrongly marked.

Mr. White said: "These 'shorts' are not dishonest ones, like the spring bottom measures of the vegetable peddlers or the short weights and measures found in

Hires' Root 'Beer a Temperance Beverage.

An article on the intoxicating qualities of Hires' Root Beer, in which a self-styled analytical chemist named F. G. Minshall is reported to have found the beer to contain varying quantities of alcohol, having been given fresh circulation in a prominent organ of the liquor trade, the matter was brought to the notice of the Charles E. Hires' Company by our Philadelphia representative, who obtained from a member of the firm, the following statement in explanation:

"The article you speak of has been referred to us two or three times and is no doubt a copy taken from *The Voice*, published in New York. That paper published an article in which they stated that the chemist F. G. Minshall, of New York had analyzed Hires' Root Beer and found it to contain a large percentage of alcohol. This article appeared a year or two ago, when our Mr. Hires immediately challenged them to prove the truth of the statement. Not only this, but Mr. Hires called on this man Minshall and found him to be a second hand junk dealer with about as much knowledge of chemistry as a dog. He was totally unable to give an intelligent explanation of how he analyzed our Root Beer or how to discover alcohol in liquids.

"We at once communicated with *The Voice*, stating the facts of the case, challenging them to have an analysis made by a reputable chemist, such as Prof. Henry Leffman, of the University of Pennsylvania, and also Professor of Materia Medica to the Board of Health of Philadelphia. After they had examined into the matter they apologized in their columns and retracted the statement. If they had not done so we would have brought suit against them for libel, and we have written the other papers that copied this article that we would bring suit, and they have all apologized and retracted the statement in their columns.

"Professor Leffman has made several analyses of Hires' Root Beer, and he states that he has found only a trace of alcohol in it, Mr. Hires and the Company are all practical temperance men and would not manufacture anything that would tend to promote intemperance. The extract is made of roots, percolated with a glycerin menstruum, and when fermented, there is a trace of alcohol in it but no more than is found in bread."

Improvement on "Tanglefoot."

The "Tanglefoot Fly Paper" has had its effectiveness increased by an improvement in the holders supplied with each case. The new device consists of a center support attached to the bottom of each holder. It is a simple mechanism calculated to raise and support the sheet of Tanglefoot in the holder. A sheet thus raised will catch flies much faster than if it lies flat. The support can be lowered readily when desired to place the holders in piles.

Ten holders are placed in every case, (one in each box) and are intended for presenting with every first liberal sale of Tanglefoot from the box.

Every time you sell a case of Tanglefoot you have an opportunity to please ten customers by giving them gratis just what they care for when buying fly paper. The careful dealer takes advantage of this.

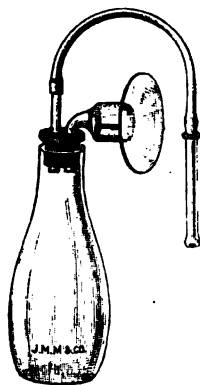
The Red Parasol.

The fashionable "fad" of the red parasol is now defended on the ground that it is an efficient freckle preventer—the actinic rays of the sun, which it is claimed are the cause of the pigmentation, being intercepted in passing through a red medium. The swell practitioner will not neglect this obvious hint; he will see to it that the epithelial disfiguration is duly prevented—when ever the ruddy hue suits the complexion.—*Journal Amer. Medical Association.*

A New Breast Pump.

A new breast pump "The Perfection" embodying in its construction many improvements over old style makes, is being placed on the market by John M. Maris & Co., the widely known glass bottle makers and dealers in druggists' sundries of New York and Philadelphia. Superiority over other designs in breast pumps is claimed for the new "Perfection" in the following points:

1. It can be very easily cleaned. By simply removing the cork (made of rubber) and the glass tubes, the bottle or



flask is left free for washing. 2. It will stand up either filled or empty, as it is made with a rounded flat bottom; this is an important feature when the bottle has been in use and contains any milk.

The "Perfection Breast Pump" is for sale by all wholesale druggists and the manufacturers, John M. Maris & Co., 20 College Place, New York and 711 Market street, Philadelphia.

"MRS. SMITHERS," said the dentist severely, "I have pulled teeth for a great many patients, but I have never heard anyone holler as you do." "Perhaps it was a holler tooth," suggested the poor woman meekly.

Petroleum in Sumatra.

The deposits of petroleum discovered a few years ago in the province of Lanahkat in the Northern portion of the island of Sumatra, and along the coasts of the Malacca Straits are being rapidly developed. Concessions have been granted by the Dutch Indian government to both Dutch and English capitalists, but at present only the Dutchmen have worked their concessions. The area of the lands conceded, amounts to 818 square miles, and it is believed that this portion of the island is very rich in petroleum. The wells are put down very near to the coast so that the expense of carriage and shipment is not heavy, and, as the quality of oil is very good, it is thought Sumatra

may, before long, enter into serious competition with Russia and America, the more so as this portion of the coast possesses a deep and well-sheltered harbor.

Dabrook's Perfumes.

Williams, Davis, Brooks & Co., of Detroit, proprietors and manufacturers of Dabrook's perfumes, are now showing one of the most complete and attractive lines of holiday perfumes ever presented to the trade.

The line is of unusual variety and contains only *this year's* importations in cut glass, together with many new novelties not hitherto shown.

This firm by its very enterprising methods, fair treatment, and above all, furnishing a high grade class of goods, have in comparatively a short time built up a business in perfumes of large proportions.

This department is under the management of Charles H. Greene, a man of wide experience in perfumery, and who enjoys an extensive acquaintance with the retail and jobbing trade of the country.

This firm is at present having a large sale on their new odor, Jouvain Lily (See inside cover, page of this issue). This is a very fascinating odor, and is sure to please your trade. Order one half pint of your jobber.

Kasan Soap.

Kasan or Kasan is the capital and metropolis of the province of that name in Eastern Russia. The city is situated on the banks of the Volga, about 600 miles from its mouth, and lies about 200 miles to the eastward of Nijni-Novgorod, where the great fair is held. A great fair is also held at Kasan, but it is scarcely so important an affair as is that of Nijni-Novgorod.

Kasan was charmingly depicted by the pen and pencil of Joseph and Elizabeth Pennell in the *Century Magazine* some two years ago. Among the leading industries of the town for several hundred years has been that of the manufacture of soap, in which pursuit certain of the inhabitants have arrived at a high degree of proficiency.

The soap made is, as a rule, distinguished by a combination of detergent power, combined with emollient properties, besides forming an excellent lather.

These properties have gradually come to be appreciated by the Western world, but the crude and uncouth manner in which the cakes of soap were marketed has hitherto prevented it from gaining due recognition as a toilet article.

J. Milhan's Son, 183 Broadway, New York City, has recently turned his attention that way, however, and has perfected arrangements with one of the best, if not the very best, manufacturer in Kasan to supply him with soap for this market direct. This soap is then milled in this country and is put up under the title of the Imperial Eagle brand Kasan soap.

The right to use the Imperial Russian eagle as a trade-mark is a rare and distinguished mark of approbation conferred on this manufacturer by the Russian government, and the soap imported by Mr. Milhan will bear the trade-mark, as shown herewith. The shaving soap is put up in handsome yellow cartons, and will, no doubt, prove a great seller.



The Buffalo College of Pharmacy.

The attention of every intending student of pharmacy is directed to the advertisement of the Buffalo College of Pharmacy which appears in this issue. The Buffalo College of Pharmacy is a department of pharmacy of the University of Buffalo, and its faculty make a special feature of laboratory instruction half of the instruction consisting of practical laboratory work. An illustrated announcement containing full particulars of the course can be had upon request to the secretary, John R. Gray, Ph.G., 246 Seventh street, Buffalo, New York.

Appreciation.*

Before closing, I have a few remarks for our drug journals. Always ready to lend their columns for the good of the cause, it is largely due to them that the interest in our association is kept up. We might as well operate a drug store without drugs as to hold our annual meetings without the support of the pharmaceutical press.

Their columns are ever ready to advance our interests. I especially commend the "quiz" department now running in several journals. To the student and clerk this is of inestimable value. The pharmaceutical journals are working harder to-day to protect and advance our profession than we are ourselves. Did the retail pharmacist make the same effort as our editorial friend, the condition of our business would be much better.

The Torsion Balance.

It will be to the advantage of every druggist who is not aware of the superiority of the "Torsion Balance" to write to the Springer Torsion Balance Co. for a copy of the Franklin Institute's report on their merits. A price list showing a variety of prescription and counter scales from \$10.00 upwards can be had upon request to the Springer Torsion Balance Co., 92 Reade street, New York.

Important Decisions Affecting the sale of Medicines by Grocers.

There was heard in the English Court of Appeals before the master of the Rolls, Lord Justice Kay and Lord Justice A. L. Smith—an action—the Pharmaceutical Society v. Armonson—in which the question of the sale of proprietary medicines was raised. This was an action brought by the plaintiffs against the defendant to recover a penalty under the Pharmacy Act, 1868, for that he, being a grocer at Derby and, therefore, an unqualified person, had kept open shop for the retailing, dispensing, or compounding of poisons, namely, a compound called "Powell's Balsam of Aniseed." The contents of the bottle in question were found to contain one-tenth of a grain of morphine. The action was tried in the County Court at Derby, when the county court judge held that the compound was not dangerous to an adult, but would be injurious and might be fatal to a child in ordinary health, and would probably be fatal to an infant who took the whole contents of the bottle. The learned judge gave judgment for the plaintiffs for the £5 penalty. The defendants appealed to the Divisional Court who upheld the decision of the County-court judge. The defendant again appealed with the result that judgment was

affirmed and the appeal dismissed with costs.

The Tax on Alcohol.

The AMERICAN DRUGGIST says, very truly, that the invalid, the sick and needy pay the duties on drugs and medicines. This is the ground taken by the *National Druggist* in its pleas against the robber tariff, the war legislation of times of peace, and we are glad that influential journals, like the *DRUGGIST*, are coming to our aid in a matter in which we have hitherto stood almost alone.—*National Druggist*, St. Louis.

Meets with Favor in England.

The *Medical Press and Circular* comments as follows on the new poison bottle known as "The Lee Poison Bottle" introduced by C. H. Lee & Co., 117 Pearl street, Boston, Mass.

A GRISLEY WARNING.

The latest Yankee idea for poison bottles, intended to warn careless dispensers of the error of their ways, is one in the shape of a death's head. It is not a beautiful thing to look at, but it is awkward to handle and heavy to lift, and even the most absent-minded of compounders could hardly fail to awaken to a sense of his responsibility.

Gordon's Glycerin.

The highest testimonial yet given to a brand of glycerin is that just received by the W. J. M. Gordon Chemical Co., Cincinnati, Ohio, at the California Mid-winter Exposition, consisting of the first premium conveying a gold medal. This is regarded as high official testimony of the superiority of Gordon's chemically pure glycerin over competing brands.

The Brooklyn College of Pharmacy.

The Brooklyn College of Pharmacy have an announcement in this issue in which the great facilities and advantages for a thorough course in general and pharmaceutical chemistry which this college offers are fully set forth. The college building is located in the most central part of Brooklyn and is easy of access from all points in New York City. The total fees for the junior course amount to \$55.00; senior course \$60.00. The entrance examinations take place September 28th and 29th, and drug clerks who are thinking of taking a college course and graduating as Ph.G. should write to Charles E. Knebel, Clerk of the College, 399 Classon avenue., Brooklyn, who will gladly forward prospectus and full particulars.

Reduced Rates to Washington, D. C.

GRAND ENCAMPMENT OF THE KNIGHTS OF PYTHIAS OF THE WORLD.—The biennial encampment of the Supreme Lodge and grand encampment of the Knights of Pythias of the world will be held at the National Capital, August 27th to September 5th.

For this occasion the Baltimore & Ohio Railroad Co. will sell round trip tickets at reduced rates from all points on its lines east of the Ohio River, August 23d to 28th inclusive, valid for return trip until September 6th, a further extension of time to September 15th can be secured, provided the ticket is deposited with the

joint agent at Washington, D. C., on or before September 6th.

The rate from Philadelphia will be \$4, Pittsburgh \$3, Cumberland \$4.55, and correspondingly low rates from all other stations.

World's Dispensary Lottery.

The Attorney-General has rendered an opinion to the Post-office Department in regard to the prize books distributed by the World's Dispensary Medical Association, in which he states that this is a lottery scheme, pure and simple, and that the mails cannot be lawfully used for the circulation of literature relating thereto.

The World's Dispensary Medical Association is the proprietor of Dr. R. V. Pierce's patent medicines. The headquarters are at Buffalo, N. Y. It seems that they distributed a lot of books, each of which was numbered, and they proposed to distribute \$10,000 in cash to certain holders of these books. The holders of ten books of certain numbers were to receive \$100 each; ten others \$50 each; twenty others \$25 each; one hundred others \$10 each, etc., with a grand total of 8,140 prizes amounting to \$10,000 in cash.

The company is out with a printed sheet containing a list of the numbers of the books which have drawn prizes, and they advise each person holding a book corresponding to a number in the list, to mail it under full letter postage with the name of the sender, and a draft for the amount of the prize would be sent by return post.

Postmasters have been instructed that the mails cannot be used for the circulation of information in regard to this lottery scheme.

The Manufacture of Glycerophosphates.

Various makes of glycerophosphates have already appeared in the market, and the products have been examined for the purpose of testing their proper composition. The general shortcomings of these preparations, both in purity and stability, have prompted the factory of Messrs. Schering, of Berlin, to devote particular attention to their manufacture. It may be observed that the proper preparation is by no means easily accomplished, and for this reason it is well to point out their specific characteristics.

Glycerophosphate of lime is probably the most suitable for therapeutic purposes. It is a dry, white crystalline powder, easily soluble in cold water, which facilitates its application per os, as well as subcutaneously.

Glycerophosphate of soda is exceedingly hygroscopic, and even to such an extent that the dry form is almost impossible to be dealt with. The only practical form would be a 75 per cent. solution, which, however, is not desirable.

Glycerophosphate of iron is a fine white soluble powder, which may have much to recommend it, because the therapeutic effect connected with an iron preparation as a tonic would give it a preferential place.

The watery solutions of all glycerophosphates do not appear to be permanent, and experiments in this direction are yet to be concluded with regard to making them stable.

Meanwhile, Schering's glycerophosphates, as above described, may be obtained through the ordinary trade channels. Schering & Glatz, 55 Maiden Lane, New York, will gladly supply further particulars.

*From an address by President Mittelbach of the Missouri Pharmaceutical Association.

Notes on Prices.

Duty on Quinine.

Rumors have been in circulation here for the past fortnight to the effect that the domestic manufacturers of quinine are working for a duty on that article. It is an open secret that for months past more or less pressure has been brought to bear upon both the Ways and Means Committee of the House and the Senate Finance Committee to put quinine, as well as all the other alkaloids or salts of cinchona bark, upon the dutiable list, but without success. In both houses of Congress the feeling is decidedly averse to any action of this kind, because of the wide medicinal uses of sulphate of quinine and the other alkaloids. In the South and West, especially, the general trend of opinion is very pronounced against taking quinine off the free list and making it dutiable. The fact that it had been made free under the Mills and McKinley bills only emphasized this position, and accordingly, the Ways and Means Committee transferred the free quinine schedules to the Wilson bill. The Finance Committee of the Senate took the matter into consideration looking to a change, but here again the feeling was so strong in favor of letting quinine and the alkaloids of cinchona bark remain on the free list that the committee concluded to leave the law as they found it.

Despite these facts,* however, many members of Congress have been asked to again try to get quinine on the dutiable list, and circulars and letters have been sent from Philadelphia and New York, signed by prominent manufacturing chemists.

The only possibility of quinine being taken off the free list will be in the defeat of the present bill and the substitution of another tariff measure in place of the McKinley law. Inasmuch as the Wilson bill is now in conference, the Conference Committee can only direct their efforts towards adjusting the differences between the two Houses of Congress, and therefore cannot touch the schedules on which there is mutual agreement. Hence, the passage of the present Wilson bill means free quinine; and if it is defeated the McKinley law guarantees the same schedule.

Senator Vest, of Missouri, one of the senate conferees, in speaking about the matter to-day, said:

"Quinine has been on the free list for a long time, and it would be perfectly absurd to make it pay a duty. Further than this, we have nothing to do with any changes in this schedule, since the bill has passed its legislative stage and is now in conference. What the Conference Committee has on hand now is to reconcile the differences, and not alter the agreements, between the two Houses."

John DeWitt Warner, of New York, said he was asked to do what he could towards putting quinine on the dutiable list, but frankly stated to his petitioners that he was decidedly averse to doing anything of the kind because it was against his own notions and convictions, as well as against the convictions of a majority of both Houses of Congress.

Other New York members here had pretty much the same to say on the matter, and expressed themselves as being against a movement of the kind indicated.

There is only the barest possibility of the present Wilson bill being defeated, and the indications at this writing are that a compromise will be effected between the two Houses, and a bill sent to

the President. In case the two Houses fail to agree, it is said on pretty good authority that the President would convene Congress at once and start them in again on framing a new tariff bill. In this latter event, there might be some show for the domestic manufacturers of quinine, but the chances are decidedly slim for such a consummation, devoutly as it may be wished for by the manufacturers of this country.—*Shipping List.*

The Position of Liqueur.*

By P. STEVENS.

The liqueur trade of the Trans-Caucasus is at present passing through a very acute crisis; in fact, unless circumstances change for the better, it is stated that this industry will, in all probability, very shortly entirely cease to exist in these districts.

"The present depressed condition of the industry is attributable to a combination of circumstances, of which the following may be considered the most important, viz.: the opening up of new sources of supply, notably in Syria, which has resulted in the glutting of the American markets; the high cost of collecting the root in the Trans-Caucasian districts (23 copecks per pood—say £1 9s 5d per ton); the high freight charged for transport by rail to Batoum, and the excessive incidental charges levied for handling (loading into and discharging from trucks, etc.), the root. The above-mentioned circumstances have all assisted in rendering the business so utterly unremunerative that the owners of liqueur root pressing factories have this year found themselves compelled to entirely suspend all purchases of the raw material.

"The bulk of the export trade in the pressed root is carried on with the United States, and the importers in that country naturally decline to pay a higher price for pressed liqueur root from the Caucasus than that at which they can procure the article from other places. On the other hand, the manufacturers out here find it impossible to deliver in America as cheaply as their competitors without submitting to serious loss; they are, however, anxious not to definitively throw up the liqueur business in the Caucasus and some time back applied to the Minister of Ways and Communications soliciting some reduction on the tariff at present in force for the transport both of pressed root to Batoum as well as on the rate charged for the transport of unpressed root on the lines in the interior between the inland stations of the Trans-Caucasian Railway; but the Minister did not find it possible to comply with this request,

It is now reported that the liqueur root pressers have the intention of making a further attempt to attain their object by appealing to the Minister of Finance, soliciting his Excellency's intervention, and requesting him to use his influence with the Minister of Ways and Communications in order to induce the latter to reconsider his decision. Should this second appeal likewise prove fruitless, or if the state of the American liqueur trade should not shortly improve—which latter contingency, however, is very unlikely—they intend from next year, i.e., after they have shipped their reserve stock of pressed root, to finally wind up their operations in this country and to transfer their business to Syria or some other suitable place, and this in spite of the fact that they have invested a very large

amount of capital in building factories and other works for preparing the article. The Minister of Finance may possibly adopt the view that it will be more advantageous for the Imperial Exchequer to earn, say 150,000rs. (£15,800) per annum by the transport of liqueur root than to entirely lose this item of revenue. During the last few years the amount annually paid by the liqueur root manufacturers to the railway in the shape of freight has exceeded 200,000rs. (£21,000) and it is, therefore, hoped that the Minister of Finance will consent to meet the wishes of the manufacturer by using his good offices in the desired direction. In any case, however, the factories will have to remain idle during the coming year, as is the case with the root collectors during the present year on account of there being no demand for the root. As the manufacturers have not purchased any root this year they will have nothing to export in 1895, since, before being pressed, the raw root must remain at least a whole year at the factories for the purpose of being thoroughly dried.

The liqueur paste factory, built some two years ago near the railway station of Elisavetpol, consumes barely one twenty-fifth part of the total quantity of root produced; on the cessation of work by the root-pressing factories, it would, of course, also be forced to cease operations. Liqueur paste is prepared only in comparatively small quantities, as there is no demand for it except in Europe, where it is used for medical purposes; whereas, in America the root is employed in enormous quantities (chiefly in the process of the manufacture of chewing tobacco for the purpose of flavoring it), but the paste cannot be imported into that country in consequence of the prohibitive duties imposed.

From the foregoing it is evident that the position of the industry in question is in the highest degree critical, and that unless some means can be promptly devised for placing it on a sound basis this trade, which during the last few years had assumed considerable importance for certain districts of the Caucasus, will entirely disappear, depriving a large proportion of the peasant population of the governments of Baku and Elisavetpol of the means of subsistence and throwing it into a state of pauperism and absolute want. Apparently the only possible means of staving off the impending disaster lies in an adequate reduction of the cost of transport being granted.

The Chinese-Japanese War and Commerce.

The effect of the Chinese-Japanese war upon commerce in this country is as yet somewhat problematical, though it seems probable that it will prove rather beneficial in a general way than otherwise. The armies and navies will require additional food stuffs much of which will probably be drawn from the grain fields of the Western United States. Clothing and ammunition will also be required and while Europe will probably supply a large proportion of these it is probable that a considerable share of the orders will find their way to the United States.

Japan has agreed not to molest the treaty ports, a decidedly politic decision, if the good-will of the European commercial powers is desired. As the European traffic is transacted at their ports it is probable that the export interests of China will not suffer and the weakness of the Chinese Navy will render a blockade of Japanese ports out of the question. It is

*Report to the Foreign Office from Her Majesty's Consul at Batoum.

at Formosa that there is most danger of interference with commerce as intercourse with that island can be almost or quite cut-off by the Japanese cruisers. This has had a marked effect on the commercial position of Formosa tea and it is reported that efforts have been made to corner the supplies of this particular tea. Other teas, so far from having been enhanced in value have declined since the commencement of hostilities. As teas have been very low for a long time, however, it is possible that an advance may take place, not directly because of the war but merely in the ordinary course of trade.

Considerable quantities of camphor also come from Formosa, but any shortage in the supplies from that island could be made good for some time at least by drawing on Japan. See our market report.

Europe and America have been carrying heavy stocks of several drugs of Chinese origin for some time, and even if production were seriously interfered with, which from the present outlook seems unlikely, no scarcity would be felt for some time in several of these drugs, among which are cassia and anise oils.

English Chemicals.

In the chemical report of S. W. Royse & Co., Manchester, issued under date of July 27, it is noted that there is no special feature to record in the Chemical Market during the current month. The orders held back from the close of the half-year ending June, have on the whole, maintained prices steady. Buyers continue timid in their purchases, only covering their immediate requirements; this policy may be continued too long. There has been a somewhat better demand for carbolic, but sellers have been disappointed in their expectations. The orders from the districts on the Continent where cholera is reported to be prevalent having only been moderate. It is difficult to find an outlet for the quantity of ammonia alkali on the market, even at tempting figures, but caustic soda maintains its position fairly well. Small concessions are granted for important business. The exports of alkali for the six months ended June 30, last, as compared with the corresponding period of 1893 are as follows, viz: 1894, 135,480 tons, value £782,858, equal to £5. 15s. 6d. per ton; 1893, 169,197 tons value £1,095,450, equal to £6. 9s. 6d. per ton. The above shows a decrease in weight of 33,767 tons, in value of £312,592, and a fall in price of 14s. per ton. Bleaching powder has maintained its price, and at present, with fair inquiry. The Board of Trade returns for this are also unfavorable, there being for the six months ended June 30 last, a decrease in weight of 10,720 tons, and in value of £100,591, as compared with the corresponding period of last year; this shows a fall in price of 7s. 6d. per ton. The ultimate result of the Tariff Legislation in the United States is being keenly watched by the manufacturers of these products, and when things settle down there is certain to be a considerable improvement in the exports of bleaching powder, caustic soda, etc. Business for 1895 is already being discussed and buyers would do well to consider the question, even at this early date. Prices are very low, any material reduction is unlikely, and there is room for a considerable advance, especially with the extra demand almost sure to come from the States before very long. Pitch maintains its position, and sellers are able to command full prices. In Naphtha, there is more offering, and prices are a shade easier. Sulphate of Ammonia remains

steady, but, for forward business lower prices are accepted. The price of acetate of lime is well maintained in America, and with increased freights in the near future, we may see a higher range of values established in this market.

Essential Oils.

Fritzsch Brothers, 34 Barclay street, New York, issue a monthly price list of essential oils, quintessential oils, musk and perfumery products, chemical preparations, pomades, fruit essences, floral extracts, etc. Copies of the price list can be had upon application to the above address.

Chemicals.

Rosengarten & Sons, manufacturing chemists, Philadelphia, and 12 Gold street, New York, issue their monthly price list under date of August 1. Fluctuations are noted in the following lines: Citric acid is lower; bismuth preparations have declined; lunar caustic and other preparations of silver are lower, in sympathy with the metal.

The Opium Crop.

A correspondent in Asia Minor sends the *Chemist and Druggist* the following statistics of the result of the opium crop of the present season, in the different opium-growing "vilayets" or provinces, made up according to the latest estimates, for the carefulness of which he vouches:

	Baskets or couffes.
1. Vilayets of Salonica, Koss-ova, and Monastir (the quantity actually harvested is 1,800 cases of 50 okas each, being in Smyrna weight of baskets averaging 60 okas)...	1,100
2. Vilayet of Hudavendighiar (comprising Karahissar, Guevé, Yenichier, Ballukessar, Bogoditch, etc.)...	1,800
3. Vilayet of Aldin.....	900
4. " Koniah.....	1,800
5. " Angora.....	450
6. " Sivas.....	500
7. Vilayets of Manniret, Ul-Aziz, and Kekban (comprising Malatea and Kharput).....	800
Total.....	6,850

of which 80 per cent. are already harvested and basketed.

Review of the Wholesale Market.

NEW YORK, August 9, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

Though the past fortnight has brought no special improvement in the distribution of drugs, dyestuffs, and chemicals, the demand from the interior points show a slight improvement. Importers find it difficult, however, to arouse even a passing interest in quantities, the rule with most buyers being to order in accordance with current necessities only, so that speculative interest is not a feature of the market. Regarding prices, values for most lines have reached a level which encourages holders in their present limits. A better inquiry is being experienced for Chinese and Japanese goods and higher prices may be looked for as a result of the restrictions incident to the war between the two countries. Our principle imports from China consist of rhubarb,

asafoetida, galls, anise oil, cassia oil, camphor, cantharides, menthol and tea. Japan sends us peppermint oil, camphor, cinnamon, vegetable wax, tea, almonds and antimony. The great plains of China afford pasture to vast herds of sheep, the wool of which is a source of much of the wool-fat of commerce and it is believed in some quarters that this substance will be affected in value by the war. In view of the fact, however, that the treaty ports still remain open to commerce it is extremely unlikely that any change of importance will occur in the prices of drugs and commodities produced in the countries affected.

DRUGS.

ALCOHOL is maintained steadily by the trust managers at \$2.30 @ \$2.34 with the rebate. Independent producers are prepared to shade trust prices, and \$2.15 @ \$2.18 is commonly quoted.

ARNICA FLOWERS are reported sold for shipment in considerable quantities at the equivalent of 7½c. laid down.

BALSAM COPAIBA has sold freely during the interval, 17 packages of Central American passing out at full previous prices. For Central American Maracaibo 88c. is asked. Of Gurjun balsam which it is reported is being employed to some extent as an adulterant of copaiba, 300 pounds, are reported sold at 10c.

BALSAM FIR, Canada, is scarce and values are tending higher. Single barrels have sold here within a day or so at \$2.25, but the lowest price now openly quoted is \$2.40 with only cans quoted at this figure.

BALSAM PERU is well sustained from the hands of jobbers with numerous sales reported at \$1.85.

BALSAM TOLU remains quiet though without quotable change in price.

BARKS have shown no special variation during the week. Wild cherry has sold to the amount of 10,000 pounds at about 8½c. Small lots of buckthorn, cascara, elm, sassafras, soap and other staples are moving at full previous prices.

BUCHU LEAVES, short, have been in demand, and we are reported sales of 2,000 lbs. at 8c.

CACAO BUTTER continues quiet at the range of 30¼ @ 31c., the inside price for English in a quantity way cash.

CANTHARIDES, Chinese, are meeting with increased attention, but in view of the Chinese-Japanese war, holders are reluctant to part with quantities. In a limited way quantity purchases can be made at 26c.

CHAMOMILE FLOWERS, new crop German, promises to be abundant, but reports are current to the effect that a considerable portion of this season's crop is of inferior quantity, and really choice goods are scarce. Numerous sales are reported at the quoted range 12¼ to 20c.

CASSIA BUDS are firmer though not quotably higher, the range standing at 18 @ 18½c.

COD LIVER OIL, Norwegian, is maintained firmly at the previous range of say \$25 @ \$28. The indications point to higher prices as the season advances.

COCA LEAVES continue quiet but there is a steady moderate jobbing inquiry with the sales at the range of 15 @ 20c. for Truxilo, and 28 @ 30c. for Huanuco.

CUBEB BERRIES are without improvement; small sales at 15 @ 16c. for XX and 12 @ 13c. for ordinary.

DOG GRASS is in moderate demand and among other transactions we are reported sales of 1,000 lbs. at 5c.

ERGOT continues neglected, though supplies are not offered at any lower prices, German and Russian being quoted 20 @ 21c. and Spanish 21 @ 24c. as to quality.

GUARANA meets with a very limited sale, though the market is sustained at the point of 90c. for jobbing quantities.

JUNIPER BERRIES continue passing out in small quantities at 2½ @ 3c.

MENTHOL continues very firm, with the available supply small and closely concentrated. We quote the range at \$5.75 @ \$6.

MANNA is inquired for with jobbing quantities of large flakes selling at 80c. and small 81 @ 82c.

LYCOPodium is generally held at 52 @ 54c. as to brand, but no business of consequence is reported.

MORPHINE has been unsettled and irregular during the past week or so, the result of outside competition. Foreign bulk has sold down to \$1.50 @ \$1.60, and the quoted range remains \$1.60 @ \$1.90, as to brand.

OPium has marked a slight advance since the appearance of our last report, but holders do not attribute the rise to anything beyond the efforts of interior dealers to restore depleted stock. The market is, however, not without rumors of another character. Strong efforts are being made in Washington for a duty to be included in the new tariff, and the indications are that sufficient influence will be brought to bear to convince the conference committee that a duty is absolutely necessary for the support of the government. At least, such is the tenor of reports. Single cases continue to offer at \$2.10. Jobbing parcels are inquired for with the market firm at \$2.10 @ \$2.15; powder being in better supply, is stationary at \$2.70 @ \$2.75.

QUININE continues in steady, fair consumptive inquiry and the market is regarded as having a strong upward tendency. This with regard to foreign brands, which are selling freely at the range of 24c. @ 24½c. from second hands. Foreign manufacturers are quoting 25c. for prompt and forward delivery.

SAFFRON, American, has advanced in the interval, and 25c. is now quoted inside.

STRAMONIUM LEAVES have sold freely at 6½c.

TONKA BEANS, Angostura continue to offer from importers' hands at \$1.30 @ \$1.40, though no sales are reported. Prime old is held at \$1.95 @ \$2.

VANILLA BEANS meet with a very limited sale at \$6.50 @ \$13; a sale of 150 lbs. medium grade is reported at \$9.

DYESTUFFS.

CUTCH continues in light supply, and the tone of the market is strong in consequence. Prime bales are quoted 5½ @ 6c; inferior grades, 4½ @ 5c.; block in boxes, 6 @ 6½c.; ordinary slab, 6½ @ 7c., and MM, 8½c.

DIVI DIVI is in better supply, and held and selling at \$55 ex wharf, and \$60 @ \$70 ex store.

GAMBIER is in fair jobbing demand, and firm at 4¼ @ 4½c. for sail.

SUMAC, Sicily, is in moderate demand, with the range at \$62.50 @ \$70, as to brand and quality.

NUTGALLS, Chinese, are without important change, either as regards price or demand; but, with the continuance of war at the source of supply, higher prices may be looked for.

TURMERIC and other lines remains quiet at unchanged prices.

CHEMICALS.

ACETATE OF LIME continues in steady moderate request, with sales of brown at \$1 @ \$1.05, and gray \$1.65 @ \$1.70.

ALUM continues to meet with a moderate sale, lump realizing \$1.75, and ground \$1.80 @ \$1.85.

ARSENIC, white is firmer, owing to an increased demand in the German markets, and holders are asking 3½ @ 3¾c., as to brand quantity.

BLEACHING POWDER continues dull at the previous quotation of \$1.75 @ \$1.85.

BLUE VITRIOL is quiet, though there is seemingly no pressure to realize below 3¼c.

CARBOLIC ACID continues in fair, moderate inquiry, without quotable change in price. Best makes of English crystals in drums held at 12 @ 12½c., and bottles at 20 @ 20½c.

CAUSTIC SODA is maintained at previous values, though no special increase in the demand is reported. Sixty per cent. held at \$2.80 @ \$2.90, and 70 to 74 at \$2.50 @ \$2.70.

CHLORATE OF POTASH continues dull at nominally 12½c. for German crystals and 12¾ @ 13c. for English crystals and powder.

CITRIC ACID is jobbing fairly at 40c. for bbls. and 40½c. for kegs.

CREAM TARTAR is meeting with about the usual demand at the range of 17c. for crystals and 17¼ @ 17½c. for powder.

COPPERAS is in fair request at the range of 60 @ 70c., as to quality.

NITRATE OF SODA meets with only a moderate demand, but the market is firm at \$2.15 @ \$2.25 ex wharf and store.

QUICKSILVER continues held at 49 @ 50c., but the inquiries are confined mainly to small jobbing lots.

OXALIC ACID, German, does not offer below 6½c., while some in the trade are quoting an advance on this figure.

POTASH BICROMATE continues to offer at 9 @ 9½c., but an improvement soon is anticipated.

POTASH, YELLOW PRUSSIAN is well sustained at 24½c., and a moderate consumptive demand is experienced.

ESSENTIAL OILS.

ANISE is well sustained at previous quotations, but reports from primary sources favor an early advance.

CASSIA is also firmer, the disturbed condition of affairs in China stimulating interest in the oil; quotations are firm at 82½ @ 85c.

CUBEBS is quoted at \$1.35, though the market is regarded as easy in the face of the lower values for the crude material.

LEMON and other Messina essences are held at their full previous prices, and a steady moderate demand is experienced for the several lines.

PEPPERMINT H. G. H. is given very little attention, and the market has a slightly easier tendency with \$2.85 quoted as an outside price. Bulk quoted at \$2.30 @ \$2.60 as to quality, with only a limited inquiry reported.

GUMS.

ARABIC is improving in position in sympathy with favorable advices from primary sources, but the demand in this market is at present slight and inconsequential. Sorts held at 11 @ 12c.

ASAFCETIDA is meeting with about the usual inquiries, and we hear of numerous small sales upon the basis of 22 @ 24c. for best Calcutta.

CAMPOR is advancing rapidly as a consequence of the war-like news from the East. Most of the camphor of commerce comes from the Island of Formosa, and as this island happens to be the place which furnishes China with most of her coal supply, its occupation will likely be fought for by the Japanese, and the supply of Chinese camphor temporarily checked. Refined in bbls. quoted 40 @ 42c. and cases 39 @ 40c.

CHICLE remains quiet, though there is no special urgency to realize, importers quoting 25 @ 27c. as their inside limit.

GEDDA is without important change and the same with Guaiac, and Myrrh; prices are however, maintained at the previous limits.

KINO is scarce and firm at \$1.40.

SENEGAL is selling fairly and among other transactions we are reported a sale of 25 bags at about 9c.

SHELLAC is in steady request among consumers, though purchases in most instances, are confined to small and unimportant quantities.

ROOTS.

ACONITE, German, in a jobbing way continues selling at 9 @ 11c.

GOLDEN SEAL is firmer in the country with holders there rather indifferent sellers. Spot quotations remain 19 @ 20c.

GINGER, Jamaica, continues scarce and firm upon the basis of 12½ @ 14c. for unbleached.

JALAP is firm at the range of 19 @ 22c. as to quality and holder. Sales reported of 10 bales within the above figures.

IPECAC continues dull and depressed. Purchases can now be made at 95 @ \$1.05 as to quality.

LOVAGE, German, is scarce and higher. Holders now asking 45c.; American in barrels quoted 50 @ 55c.

SARSAPARILLA, Mexican, is quoted 8½ @ 9c., though no sales of consequence are reported. Prime Honduras has sold during the interval to the extent of 25 bales for export at 39½c.

SENEGA continues to offer at 28c., but parcels from the West would cost this to lay down.

SNAKE is quiet. For Texas 23 @ 25c. is asked.

SEEDS.

ANISE, Italian sifted, is quoted spot 8 @ 8½c.; new crop number 2 is offered for forward shipment at the equivalent of 6c. laid down.

CANARY, Smyrna, continues to offer at 3½ @ 3¾c., and Sicily, 3¾c., though no important interest develops.

CELERY is firm at 13 @ 13½c., with numerous small sales reported at this range.

CARAWAY, Dutch, is cabled stronger abroad, but this market is not influenced. 6½c. quoted as being acceptable.

CORIANDEER spot continues under good control and is held at full 9c. Further business in new crop for forward delivery is reported at 4¼ @ 4½c. to date.

MUSTARD is quiet but firm. Reports to hand regarding the new crop are unfavorable, and the position of the article in this market is in consequence improved.

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PHARMACEUTICAL ORGANIZATION IN VERMONT.

IT is reassuring to hear of the steps which have been taken by the pharmacists of the Green Mountain State to organize themselves into an association after the goodly fashion of the fraternity in sister States. The organization was effected August 15 at a meeting held in Montpelier, and the new organization is styled the Vermont State Pharmaceutical Association, with the following list of officers: President, A. W. HIGGINS, Rutland, Vt.; vice presidents, E. R. CRANDALL, Winooski, Vt.,

W. V. BEYAN, Waterbury, Vt., and W. B. EASTMAN, St. Johnsbury, Vt.; secretary, A. H. SLADE, Montpelier, Vt.; treasurer, R. BRAINARD, St. Albans, Vt.

OF MEDICAL TESTIMONIALS.

A DEVOUT Chinese, it is said, carefully gathers and preserves all stray bits of paper he may chance upon with printed or written words thereon, lest perchance the word might be the name of a god. A somewhat similar fetich is exercised among occidental nations by the appearance of any statement in print. Having once attained the dignity of printer's ink, a statement is considered as being proven beyond a shadow of a doubt. Among the cultured classes this is not so generally accepted as it is among the uncultured masses, but even among the most cultured, who are ever the most skeptical, there is over much reliance on the inviolability of printer's ink.

This credulity is especially dominant in dealing with medical matters, a fact due no doubt to the profound ignorance of physiology and of hygiene which is so general even among persons of some education.

We had occasion some time since to refer to an advertising calendar issued by a proprietary medicine concern in which statements commendatory of certain preparations were placed below the portraits of a number of leading physicians in such a manner as to justify the inference that these physicians had given utterance to the commendations in question. Among these were some practitioners who promptly took steps to protect their good names, and as a consequence the offensive calendars were suppressed.

An even more aggravated case of the unwarranted use of a well-known name is brought to our notice by Dr. RICE in the following communication:

My attention was drawn to-day to a printed circular issued by "Kahle's Bacilline Factory, 13 to 19 Gull St., Buffalo, N. Y.," in which there is printed a certificate purporting to be

emanating from me, in the following words:

Prof. Chas. Rice, of Bellevue Hospital, New York: You may state to the public that I say your Bacilline is an excellent preparation as a deodorizer and disinfectant.

Although the title "Prof." is out of place, yet the address given leads one to infer that I am the author of the precious certificate. I hardly need say that, if it is meant to come from me, it is a pure forgery, as I have never heard of Bacilline before, nor knew anything of the existence of the firm issuing the circular.

It is not so much on personal grounds, however, that I bring this matter forward, but on account of the barefaced dishonesty attached to such unauthorized use of professional persons' names. It leads one to suspect that other signatures contained in such a publication may not be genuine either. There may be such a person as "Dr. Ernest G. Harder, Assistant Professor of Chemistry in the Laboratory [sic] of Hoffman [sic], Berlin, Germany," but who is Hoffman? Is this meant to stand for Prof. August Wilhelm von Hofmann, who died on May 5th, 1892?

If pharmacists into whose hands such circulars come, will inform reputable physicians of their acquaintance, whose certificates they find quoted therein, they will render them a real service, either by enabling them to expose a fraud, or by proving to them that it is necessary to reflect before putting their pens to paper.

The role suggested by Dr. RICE for the pharmacist is an important one which should commend itself to every thinking man in the country. It will do a double good, for many reputable physicians are so thoughtless as to allow their names to be used by advertisers in a way that is highly unethical without fully realizing the full significance of their action in doing so.

ADVERTISING AND "CHARITY."

COMMUNICATIONS are made to some learned societies which are so abstruse in their nature as not to be of sufficient immediate and general interest to warrant publication in the independent journals devoted to the various phases of scientific advancement. The material so communicated

is frequently of interest as a matter of record for consultation by other and later students.

It furnishes the building stones from which when the time is ripe the right man selects the material to construct an edifice of practical utility to the arts. But until the practical aspects of the subject become apparent it can scarcely hope to find its place in current technical literature, save possibly in the form of a condensed and abbreviated outline.

It is in the publication and preservation of this matter that the organ of the scientific society finds its use, and this use is a legitimate and praiseworthy one. The publications of learned societies which fulfil this mission are of value not only to the publishing society itself, but to the science to which that society is in particular devoted. Such of these organs as are conducted with this end in view in a legitimate and self-respecting manner have the respect and esteem of the scientific world. The *Archiv der Pharmacie* of Berlin, the *Bulletin of the Torrey Botanical Club* of New York, the *Comptes Rendus* of Paris, the *Journal of the Society of Chemical Industry* of London are each of them publications of great value, not only to the members of the respective bodies by which they are issued, but to the sciences at large. Each has an important mission which it fulfils to the betterment of science and to the elevation of scientific study.

But it is not alone the scientific body with matters of abstruse science to record that has its own publication. Every society of any kind whatever must needs have its own organ, not as in the instances above mentioned for the legitimate promotion of the scientific views of the organization, but mostly as a mouthpiece for some loud-mouthed and ambitious member of the society. If the society were willing to pay for this privilege of letting its Worshipful Grand Mogul, or whatever title he happens to bear, blow his own horn, the public at large would have no interest in the matter, and would from an economic point of view possibly favor the idea in a negative kind of way as furnishing occupation for printers, paper makers, etc., and thus tending to promote commerce. Of many of these organs, this latter is the only good that they can possibly be said to do.

But this is not all. The Worshipful Grand Mogul agrees to conduct this thing not at the expense of the society whose organ it purports to be, but at the expense of the public. To do this he gets up a dummy with cover page

printed and with spaces ruled off on the inner pages showing one-half, one-quarter and one-eighth of a page. He incidentally carries with him a list of the names of the society. Thus armed, he becomes a modern buccaneer more ferocious, more heartless and more avaricious than any who of olden times harried the Spanish Main.

It matters not whether the organization is a fourth ward "chowder party" or a Society for the Promotion of the Study of Integral Calculus as a Means of Elevating the Moral Character of Horse Thieves. When once the idea has been born that the organ can be conducted without expense, or even as a source of revenue, the methods are much the same. The Fourth Warder has a little the higher ground in our respect, since he has no hesitancy in announcing himself as "a tough mug what wants der price uv er beer." He has also the advantage that his wants, though immediate and urgent, are comparatively simple and inexpensive. The saloon keeper subscribes for space in the programme—for this is the form which the organ of the chowder party takes—and pays his five or ten dollars with a muttered oath but with the feeling that after all it is but the fortunes of war, and with the, probably well-grounded, expectation of getting it back from "the gang" later.

While somewhat less brutal in the method of preferring its requests, the more pretentious society is, under the surface, just as brutal as the fourth ward gang and is much more rapacious. With it a monthly publication takes the place of the flaring programme, and a monthly advertisement is, if we may believe the promoter of the publication, the price of the good will and patronage of every member of the society.

In every direction there is a general impression that there is money in advertising—for the man who prints it. The pharmacist is bled by the local church fair programme; he knows that as advertising it does not pay but he fears that by staying out he will offend some influential customer. The pharmacist in turn bleeds the wholesaler through the medium of the proceedings of the pharmaceutical association or possibly some smaller but even more expensive local publication. The wholesaler bleeds the manufacturer through his annual price list, while the manufacturing pharmacist is like the turtle on whose back, according to Japanese mythology the world rests—we cannot go beyond him.

We cannot believe that the members of the societies which publish these (to

them) cheaper class of organs all realize just the tactics that are resorted to nor just what the real significance of those tactics are. In one instance recently come under our notice a manufacturer was told very bluntly that "If you don't advertise in this, I won't buy any of your goods and there are twenty others just like me." He advertised. Whether he sold any goods or not does not transpire, and therein lies the hardship to the manufacturer. If the "advertising" canvasser of the organ would say "advertise and I will give you an order for \$200 worth of your goods" the manufacturer could easily determine whether or not the commission (advertisement) charged, was or was not excessive, and could act intelligently on the proposition. But instead of this the would-not be advertiser is intimidated by prospects of a vague possible loss, which the "advertising" canvasser naturally magnifies as much as possible, and the *same threat can be used to every one of his rivals*. There is where the threat in the hands of this sort of a "canvasser" is so much more potent than the promise. He could not buy for his "society" more than \$200 worth of the goods, but he can threaten half a dozen different manufacturers with the loss of that same \$200 worth of trade. In actual fact he can seldom or never absolutely command one-fourth of this \$200 of the trade of his organization.

Do the members of these "scientific" societies realize what use is being made of their names and influence? We most sincerely hope not.

One use at least these publications serve: They furnish employment to a growing class of special advertisement canvassers, men who will undertake to publish almost anything for almost any society free of cost, depending upon the use of the good name of the society to procure sufficient "advertising" to pay the agents a handsome profit above the cost of the publication.

The evil is a growing one and will probably continue to grow, but it should be recognized as a thing apart from real advertising. Money spent in this way should not be charged to the advertising account. It should be charged in the profit and loss account as "charity," for "charity covereth a multitude of sins."

NEUTRAL SALTS OF QUININE.

REPLYING to a correspondent in the "Queries and Answers" column of our issue of July 25th, we gave the substance of a member's communi-

cation to the French Academy of Sciences regarding the production of neutral muriate of quinine, and since the appearance of this article in our columns, one of our readers has favored us with a letter of inquiry in which he asks us to inform him whether sulphate of quinine could not be made by neutralizing an ethereal solution of quinine with an ethereal solution of sulphuric acid and drying by spontaneous evaporation.

We of course informed our correspondent that such a compound as "etherial solution of sulphuric acid" was hardly possible of production; but desiring to obtain an authoritative opinion we referred the matter to Dr. CHARLES RICE, who has given some attention to the chemistry of the quinine salts and communicated various articles upon the subject to the pharmaceutical press. With his customary courtesy Dr. RICE replies as follows:

There is no occasion to search for a process for making neutral hydrochlorate (or muriate) of quinine, as this salt has been known and used for a long time. It is even official in the U. S. P., under the title *Quininæ Hydrochloras*.

Alkaloids, in general, may be said to act like monad elements, so far as their combination with acids are concerned, not in the sense that they displace any hydrogen of the acid, but that for every replaceable atom of hydrogen of the latter, one molecule of the alkaloid enters into combination to produce a neutral salt. If we designate the formula of quinine ($C_{20}H_{24}N_2O_4$) for brevity's sake by Qu, we will be able to produce with halogen acids, both neutral and acid salts:

Neutral quinine hydrochlorate....

.....HCl. Qu

Acid quinine hydrochlorate

.....2HCl. Qu

And so there are corresponding hydrobromates, etc. There are also more complex salts which need not be mentioned here. In the case of bibasic or higher acids, we also have neutral and acid salts. In all cases we call that salt neutral which contains as many molecules of the alkaloid as there are replaceable hydrogens in the molecule of the acid:

Neutral quinine sulphate. Qu. \cdot H \cdot SO $_4$.

Acid quinine sulphate... Qu H \cdot SO $_4$.

The former is the official *quininæ sulphas*, the latter is the official *quininæ bisulphas*. Under the old nomenclature the former was often designated as *basic* quinine sulphate. There is even a still higher sulphate of quinine, Qu 2H \cdot SO $_4$, and more complex salts, but they may be passed over here.

The method mentioned on page 70 of your last issue, for preparing neutral muriate (hydrochlorate) of quinine is perfectly satisfactory, and has been in use for a long time.

In your letter you mention that one of your correspondents has written to you about neutral sulphate of quinine,

recommending it to be made "by neutralizing an ethereal solution of quinine with an ethereal solution of sulphuric acid, and drying by spontaneous evaporation." Very wisely and properly you add the note that you do not see how such an ethereal solution of sulphuric acid could be prepared. Strong sulphuric acid can be mixed with a small amount of ether to a homogeneous liquid. On diluting this with more ether, the latter will take up some water and a little H $_2$ SO $_4$ and the remainder of the acid will be at the bottom. Even if such an ethereal solution of H $_2$ SO $_4$ could be prepared, there would be no need of it, since neutral quinine sulphate can easily be prepared by other methods. In fact, the ordinary commercial "sulphate of quinine" is the neutral salt.

THE MEETING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

INDICATIONS at present are that the approaching meeting will be an unusually interesting and successful one in every respect.

From the chairman of the Scientific Section, L. E. SAYRE, of Lawrence, Kansas, we learn that the number of papers thus far on file to be read at the next meeting of the Association is larger than that of former years. He has already in type double the number of pages usually printed previous to the meeting, and the contributors are representative pharmacists in the north, south, east and west; the probability is, therefore, that the coming meeting, from a scientific point of view, will be one of the most important and attractive that the Association has ever held. Prof. SAYRE also reports that, while he has had nothing to do with the Educational and Legislative Section, he happens to know that this wing of the association has been very active and will do its share to counterbalance the work of the Scientific Section.

Among members who are interested in promoting a good attendance at the Asheville meeting the red stickers, on the front cover of our August 10 issue, which read "DON'T MISS THE ASHEVILLE MEETING," has come in for much comment of a favorable character, and the opinion is freely expressed that our efforts toward making the meeting a success will produce excellent results. Thus Prof. E. L. PATCH, president of the association, writing from Boston says: "The 'red sticker' is very neat and should attract attention. Your efforts to secure attention to the Asheville meeting are very commendatory. I trust they will be fully appreciated."

In a communication received from Professor J. P. REMINGTON, acting permanent secretary of the association, he says: "The stickers will undoubtedly do good service; the A. P. A. cannot have too many friends."

W. J. M. GORDON, of Cincinnati, writes: "Your red sticker is quite noticeable and no doubt will attract attention where a notice inside might not. I think it will be of advantage. The meeting is getting a very general advertising throughout the West. I trust it may be a great success and believe it will be."

Dr. H. M. WHELPLEY, editor of *Meyer Brothers' Druggist* and secretary of the Missouri Pharmaceutical Association, favors us with a note in which he says: "As a member of the American Pharmaceutical Association, interested in the welfare of the organization and the success of its annual meetings, I desire to commend the energy which you exert in advertising the Asheville meeting. There is no doubt but what the AMERICAN DRUGGIST will be the means of interesting parties in the meeting who would not otherwise attend. Your 'red sticker' idea is as effectual as it is novel."

M. W. ALEXANDER of St. Louis, ex-president of the association, makes the following comment: "As your journal has a large circulation, I think the red sticker an excellent and unique method of securing a large attention at the Asheville convention."

Prof. JAMES M. GOOD, St. Louis, member of the Council, comments thus: "As a device for arresting the attention the 'red sticker' is a success. Your efforts to bring about a full attendance at the coming meeting of the American Pharmaceutical Association are commendable, and I hope to see you gratified by the result."

H. P. REYNOLDS of Plainfield, writing of the meeting, says: There are many reasons for wishing the approaching meeting of the A. P. A. to be successful, and every effort directed to that end should be freely and gratefully acknowledged by every member. The zeal and persistence and intelligence with which the AMERICAN DRUGGIST has urged upon its readers their duty to the national association is very much to the credit of that journal. Whatever the faults and deficiencies of our trade journals I am free to say that in general, the influence is ever in the line of true progress, and it is hard to understand how the pharmacist can prosper or maintain his position without a great trade journal.

RE-REGISTRATION—A SYMPOSIUM.

THE great interest which attaches to the important question of re-registration has led us to obtain the views of a number of leading pharmacists throughout the United States on this subject. Below we publish a continuation of the series of opinions expressed by a number of the more prominent pharmacists and members of the boards of pharmacy of this country on this subject. The first of the series appeared on page 91, of our last issue.

A Desirable Union.

BY CLAY W. HOLMES,
Elmira, N. Y.

Secretary of the New York State Pharmaceutical Association.

Many persons have recently awakened to the fact that some change in the present relation of Boards of Pharmacy and State Pharmaceutical Associations is necessary in order to carry out the original effect contemplated in the construction of pharmacy laws.

For a number of years the writer has watched the general workings of the various boards and noted marked failings in certain respects. This has been in no way due to the boards, but to a combination of circumstances which the druggists themselves have really caused. A long time ago I discovered that the boards were really powerless to carry out in the full spirit, the provisions of the law. In seeking for a remedy the idea of a union of the board in its general working with the State Association seemed to fit the case exactly. Now let the law be so amended as to make the Association the parent, and the Board the branch. Establish a moderate annual re-registration fee, which shall involve membership in the state body, and let all fees go into the Association treasury, which shall bear the expense of the Board.

By this plan the pharmacists then get the benefit of both the registration and membership in the Association. The scope of this communication will not permit details of all necessary changes in the law, but even in the State of New York, where there are three independent boards, the plan can be brought to a successful issue without in any wise interfering with the prerogatives of either board, while their facilities for enforcing the law will be a hundred fold increased.

During the short time this idea has been before the general drug public it has grown rapidly in favor. One or more states are already working successfully under such a plan, and ere long, many more will adopt it.

New Jersey Favors Re-Registration.

BY W. R. LAIRD,
Jersey City, N. J.

Member of the New Jersey Board of Pharmacy.

It has always been my idea that re-registration is the proper way for creating a permanent fund for the purpose of conducting suits, etc. The registration fee should be kept at a nominal figure. To charge ten or fifteen dollars for registration as has been done in Georgia is a great hardship to most young men who are applying for examination, and would be very unpopular. The plan that was proposed at the

New Jersey State Association meeting, last May, has my hearty approval, and I trust in the near future it may be incorporated in our law. [This plan is practically identical with that of Secretary Holmes.—ED. AMER. DRUG.]

The Board Lax in the Discharge of their Duties.

BY G. W. OSTRANDER,
Richmondville, N. Y.

If the public gets any protection from the pharmacy law, the taxpayer should pay for such protection. If the druggist gets any protection from the law, he should pay for that protection. But, since neither gets any protection or benefit from the law, as enforced, it were better that it be repealed.

For ten years this law has been on the statute books, but the variety and grocery stores throughout the country are selling drugs, medicines and poisons, just as freely as they did before the law was enacted, and apparently no effort has been made on the part of the State Board to stop it.

The druggist is the most liberal business man in the country, and will gladly pay into the treasury of the State Board of Pharmacy annually—double the amount of the registry fee, if the said board will, in a business way, attempt even to enforce the law against the tradesman.

Opposed to Re-Registration—Let the Public Pay.

BY DR. A. B. HUESTED,
Albany, N. Y.

President of the New York State Board of Pharmacy.

I would suggest that we raise the examination fee to an amount sufficient for the purposes of the Board. My belief is that \$10 will answer.

I believe further that the State should appropriate sufficient money for the purpose, because it is for the public good that the work is done. This, however, seems at present not possible to be done. After the public, those most benefited are the licensees. These receive a direct pecuniary benefit by the holding of a license, and could very justly be requested to pay for the same. Re-registration is, in my opinion, the least justifiable course that can be pursued, because it is an annual tax put upon an honorable and respectable avocation, the parallel of which is not found in other honorable and respectable calling.

North Dakota Favors Union with the State Association.

BY H. L. HAUSSAMEN,
Grafton, N. D.

Member of the North Dakota Board of Pharmacy.

This board has found the question of how to increase its revenues a stumbling block, and had the pharmacy law

amended at the last session of the legislature, raising the annual dues from \$2, to \$3, the \$3 entitling all druggists to membership in the North Dakota Pharmaceutical Association. The association and board are practically a unit, and the money received goes into a general fund.

The advantage of this is, that it compels every druggist in the state to pay the three dollars and saves detail work in collecting.

The penalty clause for violations of the law in many states is not definite enough and this should be amended. Frequently when complaint is made, the case is dismissed on a technicality. I do not think it would be wise to raise the annual dues materially, but believe that the members of the Board should be furnished free transportation, as looking after violations in a state like this frequently requires long trips, and even if a violation is proven, the expenses are more than the penalty collected.

If the State Won't Support, then Annual Registration.

BY W. M. SEARBY.

San Francisco, Cal.

Member of the California Board of Pharmacy.

In answer to your inquiry as to the best means of raising the funds needed to carry on the business of the Boards of Pharmacy, I have to confess that I cannot find an answer that is satisfactory to myself. There are objections to any method that has yet been tried.

1. Annual registration is costly (because troublesome), and the cause of much irritation. I am satisfied it is only a temporary measure, and will ultimately be abandoned for some other plan.

2. A single charge of \$10, \$15, or even \$20, may do in a small populous state, where the administration of the law is comparatively inexpensive, the members of the board and the persons to be registered being easily brought together. But in this State, where the Northernmost and Southernmost points are nearly as far apart as Chicago and New York, where travel by rail and stage is costly, the expenses of maintaining the board effectively could not be met that way. And even if it could, there would be such a rebellion against a "single tax" of \$15 or \$20, that the law would be fought at every point until removed from the statutes.

As between these two methods of raising the funds, I therefore conclude that the first named is preferable as the only one that is capable of being carried out.

But—and this is a big But—is there no other way of "raising the wind."

Why should druggists pay this tax? It is not for their benefit, but that of the public. The State enacts a law forbidding any but competent persons from conducting pharmacies, and subjecting even these competent ones to oppressive restrictions in the conduct of their business. It does this for the protection of life and health, not for the protection of the pharmacist. Surely then the State ought to pay the cost of carrying out its own law. Our legislatures will not, however, pass laws making provision for defraying the expenses of Boards of Pharmacy out of State funds in the present state of public sentiment. The impression prevails in the community that pharmacy laws are for the especial benefit of pharmacists, and that therefore the latter should pay the expenses of their enforcement.

The public mind should be disabused of this erroneous impression, by a vigorous agitation in every State until they have become imbued with correct ideas.

Then it will be possible to get laws enacted that will regulate the practice of pharmacy, for the public good at the public's cost.

In the meantime I know of no better way than to charge an annual re-registration fee. It is better that pharmacists should submit to this slight tax for the maintenance of pharmacy laws than that there should be no such laws.

A Vexed Question in South Carolina.

By O. E. THOMAS,

Columbia, S. C.

Member of the South Carolina Board of Pharmacy.

The question at issue as to what is the best means of raising funds to conduct the Boards of Pharmacy, is one that has puzzled us very much. There are two sides to this much mooted question: First, the young man who wishes to come up before the Board for examination, generally has to travel some distance to attend, and that, together with the expense of board and fee of \$10.00 for registration, is quite a large expense to him. On the other hand, the Board is generally selected from leading pharmacists in different sections of their respective States, their traveling expenses and board is quite a large item, and it requires quite a large number of would-be-pharmacists to meet this. Now, in the South, take our State for instance; we had seven applicants to apply for registration at \$10.00 each; only two out of this number passed, consequently, the Board refunded to the five unsuccessful applicants one-half their fee. Five members of the Board came from a distance at an expense of about \$11.00 each. The result is that we can barely meet expenses at our present fee of \$10.00, and I have no doubt the above is a fair example of what occurs in quite a number of States. The fee of \$15.00, as required in Georgia, strikes me as the best solution of the question. Now, as to the matter of yearly registration, this would be very difficult to enforce and a subject that will not meet the approval of pharmacists generally; there is one good feature about it though, it would certainly keep the druggists who have passed the Board in touch with the Board, and as they were paying an annual fee, they would resent the fact of any man carrying on a pharmacy without a registration certificate.

Mississippi Strongly Endorses Re-Registration.

By J. C. MEANS,

Natchez, Miss.

Secretary of the Mississippi Board of Pharmacy.

As the secretary of the Board of Pharmacy which is worse paid than any other, it gives me pleasure to express an opinion of the best method of obtaining funds.

For many reasons the plan of an annual registration fee seems to me the best, especially in the case of a State which has recently passed its first pharmacy law, thereby registering, as most of them do, all druggists, good, bad and worse, then practicing within its borders without any examination.

Now, as many of these so registered change their occupations yearly, they would most probably fail to renew

their registration, and in that way much bad material would be gotten rid of.

But, to return to the matter of funds. In a large portion of the States the number of new applicants for examination yearly is so small that to place upon them the burden of expense is a hardship, especially as they may not practice in the State for any length of time.

An examination fee of five dollars, with a yearly renewal fee of one dollar, would, in every case, I believe, raise sufficient funds for the remuneration of members of the examining boards, and provide for the proper enforcement of the law.

Re-Registration Favored by the Secretary of the Missouri Board.

By F. W. SENNEWALD,

St. Louis.

Secretary of the Missouri Board of Pharmacy.

In my opinion the best means of raising the necessary funds to conduct the affairs of our pharmacy boards is by annual re-registration, as thereby the expenses of such boards are borne by the members of our profession actually engaged in business, and who receive the protection of their respective boards in their own vocations. This annual registration (the fee of which should not exceed \$2) will also give the secretaries the opportunity to keep track of the registered pharmacists in their State, which otherwise is an impossibility.

Re-Registration Opposed in Georgia.

By HARRY SHARP,

Atlanta, Ga.

Member of the Georgia Board of Pharmacy.

In relation to "the best means of raising the necessary funds to conduct the business of pharmacy boards," will say, that I am unalterably opposed to annual registration as a source of revenue. I am persuaded that a large majority of licentiates regard annual renewal fees as arbitrary—and wrong in principle, not to say an interminable nuisance; I urge, that when one is issued a certificate of proficiency to practice medicine, pharmacy, or anything else, his license should be permanent. Speaking for the Georgia Board of Pharmacy we are elated at the idea of having abolished the issue of any other than permanent license, and can forecast easy sailing as to the consideration, \$15.

It is suggested to my mind that where state boards have not the adequate means to conduct comprehensive examinations, or to enforce adulteration laws, etc., then the most feasible plan is to memorialize the legislature. If properly presented, legislative committees are more than apt to recommend the passage of bills providing a means of support and enforcement of pharmacy laws. I base my opinion on the broad ground that any wise legislator or jurist would hold that matters pertaining to public health and safety are always paramount to all private claims.

Pharmacy on the Upward Grade in Mississippi.

By J. W. ECKFORD,

Aberdeen, Miss.

Member of the Mississippi Board of Pharmacy.

The amount of money raised under the existing law in Mississippi is totally inadequate to meet the necessary expenses of the examinations of the Board, leaving the matter of funds for prosecutions entirely out of the question.

Attendance on the semi-annual meetings of the Board at Jackson entails personal expenditures upon the members of the Board. I want to see the cause of pharmacy advance even if a few of us have to suffer in pocket.

Re-registration offers better hopes of furnishing the necessary funds for conducting the business of the boards than any other method. As our legislature meets bi-annually, no change could be made in our laws even if we could count upon the requisite political strength.

I am pleased to say that there is a growing interest in the welfare of the cause of pharmacy in this State, particularly among the young men.

The State Should Bear the Burden.

By W. W. KERR,

Russellville, Ark.

Secretary of the Arkansas Board of Pharmacy.

I think there can be no question but that the proper way to meet the expenses of the boards of pharmacy is for the States to pay as they do the expenses of other officers. This may be safely set aside however, as impracticable in most cases, for the reason that legislatures, as a rule, do not take kindly to pharmaceutical legislation under the most favorable circumstances, and utterly repudiate all such as taxes the state treasury in any amount.

Just here too, I apprehend, lies the greatest difficulty of securing any amended legislation calculated to relieve the present difficulty. There would be no trouble in agreeing upon a plan that would meet the case, if there was any assurance that the plan could be enacted into a statute.

Assuming however, that we are in a position to carry any scheme that might be proposed to a successful issue, excepting only that of having the State pay all expenses, I would favor the plan of an annual re-registration in preference to any other. While this is not justice to the registered pharmacists who would have to foot the bill, it is a nearer approach to it than any other that has been suggested. It would distribute the burden in such a way as to make it fall heavily upon no one, and would have the appearance at least, of collecting the piper's bill from those who danced, which, I believe, is a universally endorsed method of procedure. Besides, it would furnish a means of keeping track of the registered men in the States, in itself a very important consideration.

To attempt to make the registration fee large enough to furnish a sufficient revenue will not do, for the simple reason that it makes the privilege too expensive a luxury to be indulged in

by many of those that apply. Tesh are mostly young men of limited means, who have just graduated from some school of pharmacy which has absorbed all their capital, or apprentices that have never been able to accumulate enough to attend college, and hence are not able to meet the expense of a trip to the Board meeting and a large registration fee.

In Arkansas the Board is not at any expense for executing the law; it only has to pay its own incidentals, and a very small re-registration fee would be sufficient to make it self-sustaining.

The North Carolina Board Favor Re-Registration.

By WM. SIMPSON,

Raleigh, N. C.

Secretary of the North Carolina Board of Pharmacy.

I quote from your letter. "At present all the Boards of Pharmacy are hampered for funds." The question at issue is, whether this deficit can best be made up by an annual registration fee, or whether it is better to raise the price of registration to ten dollars, or fifteen dollars, as has been done in Georgia.

I am not familiar with the Georgia plan, but if the increased registration fee, which I understand to be the fees from licentiates who have passed the examination, is an abandonment of the annual renewal plan, then I fear that in a very short time they will find themselves still more hampered for funds than at present.

The annual renewal plan it seems to me is the better one for several reasons; first it is the most equitable plan, in that it distributes the expense more uniformly, and is not burdensome to anyone, secondly it will realize more money, and lastly it does not seem fair to throw the burden of running the board on the young men who come up for examination.

Our Board collects an annual fee of one dollar from each registered pharmacist, and a fee of five dollars from each candidate for examination. This furnishes a sum sufficient to meet its present needs. I am free to admit, however, that the law regulating the practice of pharmacy in this State could be much more efficiently carried out if we had the means to keep some one in the field to look after and report violations of it.

There are many improvements that might be made in the manner of conducting examinations, if we had more means at our disposal—I allude to making them more practical. There are two barriers to the full development of this idea, the first is, the migratory character of the meetings of most Boards, which prevents it in that they have no place in which a candidate for license could exhibit a specimen of his skill in the art of making pills, plasters, emulsions, suppositories, etc.

It would not be practicable, nor would it be desirable, to trespass upon the kindness of a resident pharmacist for the use of his place of business, and the implements necessary for the proper exemplification of the practical knowledge of a candidate.

The only way out of the difficulty then is for the Board to have a permanent place of its own, and the necessary appliances for the use of applicants for license, in the practical examinations referred to. All this means more money, and that brings me back to the main question of how best to raise it. I am clearly of the opinion that the annual renewal plan is the most just, equitable and satisfactory that can be adopted. If one dollar per annum will not suffice, then make it two.

Nebraska Favors Re-Registration.

By M. E. SHULTZ,

Beatrice, Neb.

Secretary of the Nebraska Board of Pharmacy.

So long as the regulation of pharmacy is delegated to pharmacists by State authority to care for in their own way under the law and pay their own expenses, I see no better way than annual payment for registration to the amount of one or two dollars from each pharmacist. In Nebraska we charge two dollars annually and an examination fee in the first instance only, of five dollars. Out of sixteen hundred renewals for the year 1894, there has not been one single complaint that the fee was too high or that none should be charged. I am of the opinion that raising the examination fee alone to ten or fifteen dollars would be insufficient for revenue, at the same time a hardship upon candidates.

The Board an Institution of the State.

By O. P. SYDENSTRICKER,

Lewisburg, W. Va.

President of the West Virginia Board of Pharmacy.

In all questions of utility we may safely hold that the pecuniary maintenance of any benefit, should devolve upon the chief beneficiaries; and while a doubt exists as to whether the pharmacist or the public receives the greater benefit from the enactment and execution of pharmacy laws, so long will the source of revenue to supply necessary funds for the conduct of the business of Pharmacy Boards remain a matter of contention.

The primary and legitimate object of all pharmacy laws is to legally qualify for the practice of pharmacy only those who are found to have such an intelligent knowledge of the theory and principles of pharmacy and such an expert idea as to its practice as will render their dispensing compatible with public safety.

We are aware that an impression exists on the part of some that these laws are enacted primarily for the sole benefit of the pharmacist, but such a theory does not accord with either a legislative or public view of the matter. The public, on its part, is too critical as to the actions of its legislators, and too jealous of its interests and rights to tolerate any assumption of official function looking to class legislation; and the law makers on their part are bound too closely to observe the interests of the people to consider a betrayal of

trust, at least with such small recompense in view as the outlook would suggest.

We will assume that in many cases laws have been suggested, and even urged for enactment by a class of pharmacists who contemplated results favoring the public good, as well as incidentally their profession, but we protest the theory that they have been the chief instigators of, or have become the greater beneficiaries of pharmacy laws.

It is not intended that deductions should be made from the above that pharmacy as a profession or pharmacists as representatives of business relations havenot received material benefits,—for that protection which the law extends to the public becomes of significant importance when applied to them, in this: that while incompetency is discriminated against, the educated, intelligent and worthy members of the profession are favored,—thus tone, dignity and success are attained.

Returning now to our first proposition regarding pecuniary maintenance of this benefit, we feel justified in assuming that the public should provide the principal fund for the maintenance of a pharmacy law, and this should of course be done by legislative appropriation. The fund necessary in any state or territory becomes so small and insignificant in proportion to the great number of taxpayers, and the protection it affords so satisfactory in contrast to the amount to be levied on each individual that no objection need be feared on the part of the public.

We are aware also that in some instances the phraseology of pharmacy laws implies no responsibility on the part of the public treasury to supply this much. Our own State law affords a conspicuous instance, but notwithstanding this, we have been successful in securing a yearly appropriation, by properly submitting and advocating our wants before the legislature.

We believe that all fair-minded legislators will recognize the necessity of providing for the enforcement of any law of actual importance, and of benefit to the public. This in fact becomes one of the most important features in legislation, for without the means of execution, a law becomes inoperative and useless, and will provoke more evil than good.

Incidental to this mode of securing funds for Pharmacy Boards should also be added reasonable fees to be collected for registration of druggists, as well as for re-registration under some circumstances. We think a fee of five dollars is neither burthensome nor too small for such a privilege. Even if the applicant be very poor he can easily arrange for the payment of so small an amount. For re-registration, covering loss of certificate, etc., a smaller fee may be named.

No complaints will result from the payment of fees of such an amount, and in a State of usual size a considerable fund may thus be obtained. We hold that this is the full extent to which druggists should be taxed for the maintenance of a pharmacy law.

If greater taxation, directly placed on

druggists is resorted to, much discontent will result and constant protests accompany its payment. Furthermore, such a system of ownership on the part of the druggist in relation to the Board will be inaugurated that the commissioners will retire in disgust from the office. The affairs of the Board are likely to become matters of constant espionage and dictation by the druggists, and the Board will be constantly memorialized for the promotion of personal interests.

Every Board should be altogether independent of the druggists and their rulings should remain free from trammel of any kind. The ability of any official to act independently in the discharge of duties is always thoroughly appreciated, and this will apply specially to Boards of Pharmacy whose duties are constantly found in the line of regulating and toning the actions of druggists who have any disposition to ignore or disobey the provisions of their pharmacy law.

In conclusion we may pertinently suggest, that very modest remuneration of commissioners of pharmacy should be considered as favorably comporting with the nature and dignity of their office, and that pecuniary emoluments should form no part of their object in seeking the office or in discharging its functions. A very moderate return for time employed and defrayment of actual expenses, will aid in reducing the pecuniary wants of a Board to a minimum, and at the same time should be all that a Board of Pharmacy ought to ask or expect.

Each Should Pay Something Annually.

BY JOHN T. MOORE,
Lawrence, Kansas.

President of the Kansas Board of Pharmacy.

The Kansas Board favors a small annual re registration fee as being a practicable way of providing funds for its necessary expenses.

In whatever manner raised, the fee should not be burdensome or secure more money than actually necessary. As pharmacists are constantly and equally benefited by board work—I think each druggist in business should pay *something* annually.

An Opinion from Minnesota.

BY L. A. HARDING, B.S.O.P.H.D.,
Fergus Falls, Minn.

Member of the Minnesota Board of Pharmacy.

A great diversity of opinion seems to exist, and justly so, as to the best method of raising funds for the adequate support of the boards of pharmacy. Many of the boards are undoubtedly greatly hampered for funds and their benefit to the state in which they exist correspondingly handicapped. Those boards who are thus troubled have for a long time sought a remedy for this evil, but practically without avail, for in all states the pharmacy acts are self imposed enactments by the pharmacists for their own protection, yet they feel very reluctant to justly put their hands in their pockets and support the cause for which they so energetically clamored, somewhat la-

boring under the false impression that nothing else, is needed than the enactment of laws and the creation of a board of pharmacy. When, however, they find out to their sorrow and discontent that their neighbor is violating this law, and the board of pharmacy is not immediately jumping on to him, they at once denounce the board of pharmacy, law, and all, without justly inquiring why the pharmacy board is not prosecuting. It is true, that the prosecutions are had in the name of the State, but it is also true that the expense of the prosecution must be borne by the board treasury, and if this is depleted, the best intentions of any board are for naught. How then to keep a sufficient sum of money in the treasury has been a most serious question in many States. The annual registration for the replenishment of the board treasury seems in my opinion one of the best means to provide the boards with adequate means to carry on their work. To insure satisfaction of all concerned, of course examination fees in all States, with perhaps the exception of one, are too small, and another evil that of returning the fee to the applicant in case of failure to pass a satisfactory examination is quite wrong. The most plausible theory, perhaps, why this should be done, is because the candidate for registration, in case of failure receives nothing, and consequently, should not pay anything. While this cannot be gainsaid, it is likewise true, that the board, having had the trouble and expense just as much as though he had passed successfully the ordeal, should have recompense for its part of the work. What does the board gain by having some of the candidates come before them time and time again, and every time come as far from passing as before; the board is continually under expense on his account, and slowly, though surely draining upon the treasury.

All boards should have the power to retain the fees paid in for examination, whether the person who paid the same is successful or not. The rule that you cannot get something for nothing should work both ways.

Pharmacists all over the United States are at present urging practical examinations as the only true criterion of a person's fitness for the profession. Several boards have instituted practical examinations, but the expense of conducting them is quite heavy, examinations are prolonged quite extensively, though to the pharmacist they are worth all the trouble and expense.

The only feasible way seems annual registration to raise revenue sufficient for the work of the boards, and every pharmacist should willingly add his mite, so as to insure the successful enforcement of laws in all respects and proficiency in examinations. It is obvious that if a board cannot get sufficient funds to conduct the business properly, on a requirement of 75 per cent. rating, it is tempted to do the next best thing, namely, reduce the required standard sufficiently low to pass enough to pay their own mileage and per diem, etc., and the result is degrading instead of elevating pharmacy.

All the States that have annual renewal fees are in good shape to do work, and it may be noticed they have the best laws, require the highest rating of their men, and consequently, as a rule, turn out the best class of workers. But only so much money should annually be collected as to defray the expenses of the board and not create any surplus in the treasury, as this is one of the chief factors to create a continued endeavor to abolish annual registration.

Favors Re-Registration.

BY J. O. BURGE,
Nashville, Tenn.

Secretary of the Tennessee Board of Pharmacy.

In regard to the question sent me the other day for my views as to the best way to meet the expenses of the boards of pharmacy. I rather like the annual fee system best, if the druggists have to foot the bill, which is usually the case I believe. It seems easier for a man to pay one dollar a year, or some small fee that way than to pay a large one like the Georgia law. It is a good deal like joining the A. P. A. and taking out a life membership. It seems much easier to pay \$5 a year than to plank down \$75 at once; it takes 15 years to pay in that amount.

The Necessity of Annual Registration.

[Editorial in the *Western Druggist* of August 15.]

Druggists are found in States having pharmacy laws who object to the principle of annual registration, their objections being based, first, on the assumption that re-registration is unnecessary in that a man, once qualified, is presumably always qualified, and, second, that it involves the payment of an annual tax to be used in sustaining the administration and enforcement of a law enacted solely for the public good, and hence one which should be sustained by the public and not made a special charge on the druggists of the community. As to the first objection it may be said annual registration is not proposed for the purpose of testing qualifications, but merely to permit of and facilitate proper revision of the registration roll, which should be done at least once each year to purge the record of names which otherwise, with the old names never for any reason erased and the new accumulating year by year, in time must become unmanageable from its very size. To keep a record, filled with names of men dead, removed from the State, or gone out of business, involves much needless labor and expense, brings contempt upon the living certificates, and furnishes countless opportunities for fraud. As to the needlessness of the tax there can be no doubt that the public should sustain pharmacy legislation, but if the public shirks its duty what shall be done about it? Pharmacy laws are not automatic in their action. Prosecutions become necessary if the efficiency of the law and the welfare of pharmacists under it are to be maintained. The alternative in effect is either no

law at all or a law supported by a small annual fee by the druggists themselves. The question is not one of equity, but of expediency and practical

results. It is to be hoped that the States now moving for amendments of the character indicated will not fail of success.

the following method for prevention of rust. Dissolve 1 part of paraffin oil in 200 parts of benzine. Wash the instruments dry in a current of warm air and dip them into this solution, moving the different parts (of scissors, tongs, etc.) and then lay on a plate in a warm room to dry.



Thyroid tabloids in myxœdema.—At the Washington meeting of the American Neurological Association held May 30, 31, June 1, 1894, Prof. M. Allen Starr of New York presented photographs of patients having myxœdema; in three, improvement was seen. There were some practical points, he said, about using the thyroid extract. He had used fresh preparations made for him by his assistant, but he now used exclusively the cheapest preparation, which was of English manufacture and was imported in the form of tabloids by several New York drug firms. It was put up in a very neat form, and was odorless and tasteless. It cost only one cent per tablet. Each thyroid tablet contained five grains of thyroid extract, and after a patient was practically cured, one tablet per day was all that was required. He had seen in two of these patients melancholia with suicidal intent. Each of them had had hallucinations and dementia.

On the Purity of Iodine Sold as Resublimed Iodine.*

BY CHARLES O. CURTMAN.

St. Louis, Mo.

Chairman of the Pharmacopœial Research Committee B.

Crude iodine, as supplied to the trade, is frequently very impure. Scraps of iron and similar makeweights are occasionally found in the kegs, and chlorine, bromine, cyanogen and moisture (often to a considerable amount) are always to be looked for. But the process of purification appears to be well conducted at present, and every one of the specimens obtained from six firms is of a grade even higher than demanded by the U. S. P. The pharmacopœial tests were applied in succession with the following results:

a. When iodine contains any notable amount of moisture its solution in chloroform or carbon disulphide is turbid. All of the specimens dissolved in chloroform and in carbon disulphide, yielded a perfectly limpid solution.

b. A saturated aqueous solution of the iodine, converted into sodium iodide by means of sodium hyposulphite (thiosulphate) and tested for cyanide, yielded a negative result with every specimen.

c. A similar solution, treated with silver nitrate and ammonia water, gave on acidulation with nitric acid, a barely perceptible opalescence, and if, instead of ammonia water, a 5 per cent. solution of ammonium carbonate was used, the solution remained clear. All of the specimens behaved alike in this test.

*This is Report No. 8 of the Pharmacopœial Research Committee B. It was mailed to members on August 13, and is here presented by the courtesy of the author.

Antipyonine is a polyborate of sodium, used in ocular practice. It is very soluble, innocuous, and not at all caustic.

Butyromiel is the name applied by Pauliet (*Rev. de Therap. Med. Chir.*) to a mixture of two parts of fresh (unsalted) butter with one part of honey. It is prepared simply by trituration, and is recommended by Pauliet as a substitute for cod liver oil.

Treatment of Blepharitis. Ayres (*Ophthalmic Record*) suggests the use of hydrogen peroxide for blepharitis marginalis. The applications are made once or twice daily along the roots of the lashes by means of pledgets of cotton on the end of a toothpick.

Adonis Aestivalis is recommended as an anti-fat. Ten drops of the tincture 3 times daily for 12 days resulted in reduction of weight of one patient from 342 pounds to 325 pounds, at the same time relieving the dyspnoea and other painful symptoms incident to obesity. —*Medical Record*.

Marble dust soap composed of common washing soap with three times its volume of sifted marble dust added and with four per cent. of lysol. It is intended, like the pumice and such like soaps, to obviate the necessity for using a hand brush, which latter is generally full of bacilli. —*Therap. Monatsheft*.

Lignosulfu is a by-product of the manufacture of sulphite wood pulp which has been put on the German market by Sedlitzky of Salzburg as an inhalant for certain disorders of the respiratory organs. It contains the etherial oils of the woods used together with both free and combined sulphurous acid. —*Sudd. Apoth. Zeit.*

Rhinoscleris is prepared from the bacillus of rhinoscleroma in the same manner that tuberculin is prepared from the bacillus of tuberculosis. It acts somewhat like tuberculin inducing chill, fever, etc., when first injected, but patients soon become accustomed to the toxins. Good results are reported after prolonged treatment of rhinoscleroma, a chronic affection causing induration and atrophy of the internal nasal tissue. —*Pharm. Zeit fur Russ.*

The Treatment of Epilepsy with Organic Extracts. Fere, one of the ablest of French neurologists, at the request

of D'Arsonval, gave the method a thorough trial at the Bicêtre Hospital. In his communication to the Société de Biologie, just four years after Brown-Sequard's, he, in unmistakable language, disapproves of the method and cites nine cases which had been under treatment. No favorable results were obtained in any case; on the contrary, the injections seemed to act as a depressant.

Loretin in skin troubles.—In certain industries in which extreme and varying temperatures, and excessive dampness or dryness have caused troublesome skin irritations, loretin has proved itself a very excellent soothing and healing medium.

The chapped or irritated parts of the skin are either bandaged over night with a 5 per cent. loretin gauze, or preferably, are rubbed with a 5 or 10 per cent. loretin talcum powder.

All itching of the skin disappears. This treatment has also proved effectual in cases of eczema.

Iodoform in Fibrinous Rhinitis.—According to Uladar (*Sem. Med.*) the best treatment of fibrinous rhinitis—as is known, a chronic affection characterized by the incessant production of false membranes on the nasal mucous membrane—consists in irrigating the nasal cavity and then copiously insufflating iodoform. By this means he claims to have cured five cases of fibrinous rhinitis which previously had resisted all other remedies. These insufflations should be continued as long as the false membranes have not entirely ceased re-forming. Sometimes it is also necessary to occasionally paint the nasal cavity with a solution of cocaine, to combat the painful sensations of tension and prickling in the nose.

To protect and to remove rust from instruments.—Sangu proposes the following method of removing rust from instruments. Lay over night in a saturated solution of zinc chloride. The rust disappears through reduction. On removing the instruments, rinse them with clear water, place in a hot soda and soap solution, and dry. It is also advantageous to polish with absolute alcohol and chalk. The editor of the *Pharmaceutische Centralhalle* gives

d. For ascertaining the percentage of pure iodine by titration with decinormal sodium hyposulphite, the U. S. P. directs that 0.32 gm. of iodine should require 25 cc. of the volumetric solution.

The atomic weight of iodine is 126.53. Hence if 0.316325 gm. were taken (instead of 0.32) each Cc. of decinormal sodium hyposulphite would exactly correspond to 4 per cent. But as the quantity taken is somewhat larger, 25 Cc. correspond to 98.85 per cent., the minimum demanded by the U. S. P.

In testing the specimens my first care was to have the titer of the decinormal solution of sodium hyposulphite (thiosulphate) absolutely correct, as this solution is under unfavorable conditions, very liable to change. So I not only weighed directly the proper quantity of pure salt (which may now be readily obtained), but the solution prepared by direct weighing was controlled by testing with iodine, purified by the process given by the U. S. P. on page 485, and found to correspond accurately.

Instead of weighing 0.32 gm. of each specimen of iodine, and dissolving it together with 1 gm. of potassium iodide, the following process was adopted, which not only facilitated accurate adjustment of quantity, but permitted repeated titrations of the same specimen without repeating the weighing.

Into a light weighing flask with well-ground glass stoppers about 30 Cc. of concentrated solution of pure potassium iodide were placed, and the bottle and contents weighed. Then from 0.6 to 0.8 gm. of iodine was introduced and the bottle weighed again, to ascertain the exact amount of iodine.

The solution was then transferred to a graduated cylinder and diluted with distilled water, so that 1 gm. of iodine would be contained in 1000 Cc. In case (specimen No. 3) 0.6400 gm. of iodine had been used, the cylinder was filled up to 640 Cc. and the contents thoroughly mixed. Of this amount 253 Cc. were transferred to a flask, and on titration required exactly 20 Cc. of decinormal hyposulphite, corresponding to 100 per cent., as each Cc. corresponded to 5 per cent. of pure iodine.

In this manner all of the specimens were examined and in every case required more than 19.95 Cc., and from that to exactly 20 Cc. So that the minimum was above 99.75 per cent. and (allowing for the limit of errors of observation) the specimens may all be considered as substantially pure and above the minimum required by the U. S. P.

Concentration of Sulphuric Acid by Electricity.

The industrial concentration of sulphuric acid presents certain difficulties that are due to the fact that only platinum, glass or porcelain vessels can be employed. The use of platinum has prevailed in practice by reason of the fragility of glass and porcelain apparatus, but the employment of it is costly, although the researches of Messrs. Faure and Kessler have reduced to a minimum the quantity of this metal brought into play. Moreover, it is found that the sulphuric acid always dissolves a small

quantity of the metal, so that the apparatus have but a limited duration.

The *Electrician* announces that Mr. Bertram Blount, in order to obviate this inconvenience, proposes to heat the acid to be concentrated by means of a platinum conductor entering the liquid and traversed by an electric current sufficient to raise its temperature to 150° above that of the acid. The latter may therefore be placed in non-metallic vessels, which are no longer subject to breakage, since they do not transmit heat. In order to be concentrated from 60° to 68° B., 117 kilogrammes of acid require 32,679 heat units, say 44.2 horse hour. It results from these figures that electric concentration requires an output of fuel five times greater than direct condensation; but by reason of the advantages enumerated above, it is possible that the final cost of the operation may, notwithstanding, be less than by direct heating, especially in the case of a motive power produced by waterfalls.

Mr. Blount recommends the use of a platinum wire 5 millimeters in diameter and 77 centimeters in length heated to 480° C. by a 364 ampere current. Such a wire would be able to concentrate 24 kilogrammes of acid in five hours. The maximum difference of potential would be 5 volts. It seems insufficient to cause a sensible loss of platinum through electrolysis, and any such loss might be completely eliminated by the use of alternating currents.

Lead in Carbonated Waters.

The question of the presence of a lead salt in carbonated waters is a very serious one, and too much care cannot be bestowed upon it. It is incumbent that every precaution should be adopted to prevent a possibility of such contamination. The ordinary tartaric and citric acids of commerce do certainly contain just a distinguishable trace of lead, but in such small proportions as to be, in the opinion of authorities, absolutely harmless. A source of danger is the leaden pipes through which passes the plain water used, namely, either the leaden pipes connecting the water supply from the main or the leaden pipes attached to certain parts of old-fashioned machinery. The pipes used now by machinery makers are invariably pure tin pipes. Taking this for granted, the question may then reasonably be asked: "Are the tartaric and citric acids of commerce safe, and must the bottler buy qualities costing more?"

Now these are points which greatly affect the welfare of the trade, and especially the pockets of the bottler. The writer has gone to much trouble and some expense to ascertain the true position, and as a result to his investigations it may fairly be asserted that if good tartaric and citric acids are used, such as respectable houses have supplied and are supplying, it is not necessary to make any change. The trace of lead alluded to in ordinary good commercial qualities of tartaric and citric acids is from 0.003 to 0.006 per cent. Of these acids 2 ozs. are generally used to the gallon of syrup. To be thoroughly on

the safe side it has been reckoned that the acids contain 0.01 per cent. overestimated as it will be seen. Taking it, therefore, in the above proportions, each bottle of carbonated water would contain under 0.00096 of a grain of lead. It is apparent, therefore, that even if this contamination were double or treble this, there would be absolutely no danger, and such beverages could not be considered injurious to health. Professor Attfield, of the Pharmaceutical Society of Great Britain, gives the following opinion on the subject:

Let us, for convenience of calculations, assume that the carbonated beverage contains slightly more than 0.00096 of a grain of lead per bottle, that is, 0.091 of a grain, the thousandth of a grain. Then, obviously, one grain of lead would be contained in 1,000 such bottles. Now, a medicinal dose of a lead compound soluble in such fluids as carbonated beverages is 1 to 4 grains. (See lead acetate in the pharmacopœia.) The amount of lead in such a compound will be rather above $\frac{1}{2}$ grain to 2 grains. A medium dose would include 1 grain of lead.

So, then, a person drinking the drink mentioned would have to swallow 1,000 bottlefuls before he would have swallowed even a single medium medicinal dose of lead. How many thousands of bottlefuls he would have to swallow before he could do himself the smallest harm, would be difficult to estimate; for very much larger doses than the foregoing—doses frequently repeated—have been swallowed without any harm ensuing.

Lead is often termed a "cumulative" poison, but I have been unable to discover the slightest evidence that the proportion of lead mentioned would accumulate during the whole time that could be occupied by any ordinary human being drinking quite five to ten thousand bottlefuls of lemonade. Clearly, lead does no good in carbonated fluids. Beverages must, like Caesar's wife, be above suspicion. But the notion that one thousandth part of one grain of lead in one bottleful of lemonade can do any harm whatever to a person drinking the beverage is one of those notions that must be classed among notions that are utterly and hopelessly absurd.

For Producing Ice on a Small Scale.

O. Liebreich describes in the *Therapeutische Monatshefte* the following apparatus for producing ice on a small scale. The apparatus consists of a double walled drum with an outside covering of asbestos, which turns on an upright axis by means of a crank.

In the opening a tinned can fits which is shaped like a truncated pyramid with a four cornered base. It is closed by a metal cover with thumb screws. This inverted pyramid is filled with water at 14° C. [57° F.] and 3 kilos, [6.6 pounds] of ammonium nitrate and 3 kilos [3 quarts] of cool water are put in the double lining of the drum.

This is then turned rapidly for fifteen minutes when the water in the tinned can will be found to be frozen, yielding

about 500 grammes (one pound) of ice. The ammonium nitrate can be recovered from the solution by evaporation with a loss, if carefully managed, of about 1.33 per cent. If carefully carried out the process yields ice at a cost of about 40 pfennigs per kilo, says Dr. Liebreich, which would be equivalent to about four and a half cents per pound if the price of the ammonium nitrate were the same here as in Germany.

The Nature of Dreams.*

There are learned men, who, while not admitting that they regard dreaming as a mystery, still imply that the brain has some remarkable powers during sleep denied it in the waking state. Organs are constantly varying in their degree of activity and this depends upon the amount of circulating blood; thus when the brain is full of blood it is active, and when anæmic, it is in a state of repose. It is now generally admitted that during sleep thought may continue, or, as it is styled, unconscious cerebration. Reliable persons maintain that where some difficult questions have been on the mind before going to sleep, they have found these questions solved in the morning, which proves that although consciousness is suspended the brain remains at work.

With regard to dreaming, the accepted theory is that the brain or mind is at work as in the waking state, but that being cut off from all the usual surroundings and consciousness being absent, it is unable to correct itself or its impressions and so wanders on in an endless maze. This may be better understood by remembering what we do, when in doubt as to the character of our thoughts. We are, for example, sitting over the fire and darkness begins to surround us, lost in contemplation we fall into a reverie, and are altogether in a state of abstraction. We start up, ascertain where we are, discard the mental vision, and are ourselves again. In sleep we cannot do this, and the vision becomes a reality, which, when we awake to consciousness, we call a dream. Whatever the dreamer sees or hears in his dream is of his own creation originating in himself and when he argues a question with another person, he is dictating the speeches of both. If it be true that the dreamer did all the things which he relates, then there would be something of a supernatural kind taking place during sleep. The only possible solution of his difficulty lies in the denial of the dreamer's assertion that certain events did happen during his dream. If we dream we are flying through the air we fully admit our dream was a nonsensical one. In other instances, the illusions may not appear to be so grossly impossible, yet probably they have been fabricated in the same manner. A dream cannot be anything more than a picture formed in the mind during sleep and the solution of it is the interpretation. This explains why in an exceedingly short space of time, one may have what appears a long dream. We conjure up a picture made of parts, it may be rap-

idly formed, but the description of it takes time. If we introduce into it the figure of a German professor, he speaks his own language perfectly, although the dreamer when awake is unable to speak a word of German. In the case of a man who has a dream made up of consecutive parts, terminating appropriately with the sound of church bells, where during the progress of his dream a bell has actually been ringing in the sleeper's room, which eventually wakes him, does it not appear highly probable that this very sound originated the whole chimera? The dreamer merely forms a mental picture and the description of it he calls his dream.

The Electrolysis of Urinary Calculi.

M. Yvon, the well known French pharmaceutical chemist, has made numerous experiments with a view of elaborating a process of dissolving urinary calculi by means of electrolysis, and has communicated the results to the *Paris Repertoire de Pharmacie*. He has found that when a current of electricity is passed into a solution of sodium sulphate by means of two electrodes of platinum, the solution is decomposed, sulphuric acid and oxygen being set free at the positive pole and sodium at the negative pole; the sodium by a secondary reaction being converted into caustic soda. If a urinary calculus is placed between the points of the electrodes, the whole plunged into a solution of sodium sulphate, and the electric current turned on, the calculus will dissolve or melt away at the points of contact. In his experiments the dissolution of calculi composed of triple phosphates and earthy carbonates took place at the positive electrode; uric acid calculi were acted upon by the negative electrode.

He believes that his experiments prove that the dissolution of urinary calculi by electrolysis can be accomplished, and suggests a method of operating within the bladder walls. The bladder is emptied of urine, filled with a saturated solution of sodium sulphate, and two electrodes of platinum, insulated and in shape resembling a lithotrite, are introduced. One of the electrodes is made slightly concave at the point where the calculus is seized, while the other terminates in a blunt point. The two exposed points are completely separated from each other, while communication with the battery is maintained. The calculus will undergo perfect dissolution at the point of contact, and the time taken for the operation may vary from one to two hours.

Salol as a Pill Coating.

The *Chemist and Druggist* prints the following note on the use of salol as a pill coating, in reply to the query of a correspondent, in its issue of August 4.

PILL COATING WITH SALOL.

We have seen no reference to its use for this purpose before, but presume it is intended to replace keratine in pills intended to pass into the intestines before being dissolved. Since receiving your query we have tried various methods of solution, and find

spirit etheris B.P. the most useful solvent. If a saturated solution of salol in spirit of ether be made, and a sufficiency of French chalk be added to the consistency of a thin cream, a very useful coating is obtained, when pills are coated in a similar manner as when gelatine is used.

Yvon in the *Union Pharmaceutique* (January, 1892) suggested this formula:

Salol.....	2.0
Tannin.....	0.5
Ether.....	10.0

The pills receive two or three coatings of this when they are ready for dispensing.

In September, 1892, A. Suchomel communicated a paper to the *Pharmaceutische Post* in which he expressed his doubts as to the effectiveness of the coating proposed by Yvon and suggested dipping the pills into melted salol. (*Pharm. Record*, October 20, 1892.) A small quantity of salol is melted in a porcelain dish upon a water bath. The pills are then arranged in the usual way on the points of pins and dipped. The small pinholes are then brushed over with a camel hair pencil.

The *Pharmaceutical Journal* of September 16, 1893, contains a note on "Salol as a material for coating pills," by Dr. G. Oeder, taken from the *Pharmaceutische Zeitung*. Dr. Oeder prefers to apply salol in a melted condition for coating pills, and the operation is carried out in an enamelled sheet iron tray, upon the bottom of which some powdered salol is melted over a spirit lamp or gas flame. The pills are then placed in the tray and rolled in the melted salol, sufficient heat being applied meanwhile to prevent solidification until the surfaces of the pills are coated with a thin layer. The heating is then discontinued and the rolling of the pills kept up for about one minute until they have sufficiently cooled.

For thirty pills of average size the quantity of salol requisite is from a gramme to a gramme and a half, but if the pills are not sufficiently coated in one operation the treatment must be repeated. The pills should have a uniform translucent coating, free from cracks or bare places, and the quantity of salol on each pill need not exceed two centigrammes.

Numerous references to the use of salol for coating pills have appeared in pharmaceutical literature during the past two or three years, and it is a little surprising to find the editor of a drug journal confessing ignorance of the subject.

Oeder has recently called attention to the fact that in using salol-coated pills the physicians may sometimes obtain the physiological action of salol itself where that is not desired. He therefore recommends (*Berlin Klin. Woch.* 1894, 364) that the pharmacist write on the label of salol-coated pills the amount of salol present as a guide to the physician. He also suggests that when administering such pills to febrile patients the temperature of the stomach be lowered for two or three hours either by swallowing pieces of ice or by drinking cold fluids so as to prevent the melting of the salol coating.

He further suggests the possibility of obtaining for use in such cases a salol of higher melting point than the commercial article generally used.

*From an article by Dr. Samuel Wilks in the *Medical Magazine* for February.

Extracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.*

(Continued from page 95.)

Veterinary Medicines.

Glanders.

GLANDERS ELECTUARY.

	Grammes.**	Grains.
A.—Antimony sulphide in so powder	50	[50]
Ammonium chloride.....	60	[60]
Flowers of sulphur.....	60	[60]
Crushed juniper berries.....	180	[180]
Sodium sulphate, granular.....	180	[180]
Rye flour.....	300	[300]
Water, a sufficient quantity to make an electuary.		

Give a mass the size of a duck's egg every two hours.

FOR OBSTINATE CASES.

	Parts.	Grains.
B.—Antimony sulphide.....	100	[100]
Flowers of sulphur.....	100	[100]
Fennel seed—in coarse powder.....	100	[100]
Calamus root—in coarse powder.....	100	[100]
Juniper berries—crushed.....	300	[300]
Rye flour.....	300	[300]
Oil of turpentine.....	15	[15]
Water, a sufficient quantity to make an electuary.		

Give a mass the size of a duck's egg four times a day.

GLANDERS POWDER.

	Parts.	Grains.
A.—Antimony sulphide.....	50	[50]
Sodium sulphate, granular.....	250	[250]
Juniper berries, crushed.....	100	[100]

One tablespoonful with each meal.

	Parts.	Grains.
B.—Flowers of sulphur.....	25	[25]
Antimony sulphide.....	25	[25]
Sodium sulphate, granular.....	250	[250]
Liquorice, in coarse powder.....	100	[100]
Buckthorn berries, crushed.....	100	[100]

Mix one tablespoonful with each meal.

FOR VERY LIGHT CASES.

	Parts.
C.—Buckthorn seed, in coarse powder.....	300
Anise seed.....	300
Sodium chloride (common salt).....	300
Sodium bicarbonate.....	100

Strew two teaspoonfuls on each meal.

POULTICE.

	Parts.
Linseed meal.....	300
Chamomile, in coarse powder.....	300
Wheat bran.....	600

Mix the above with hot soapsuds, and cover the swelling of the neck with the poultice.

APPLICATIONS.

	Parts.
A. Volatile liniment.....	300
Oil of turpentine.....	300

Rub the neck with this liniment two or three times a day.

	Parts.
B. Mercurial ointment.....	30
Green (soft) soap.....	30
Glycerin.....	40

Rub the neck twice a day with this liniment.

TO PROMOTE THE SECRETION FROM THE NOSE.

	Grammes.	Grains.
Ammonium carbonate.....	10	[154]
Carbolic acid.....	5	[77]
Oil of turpentine.....	10	[154]
Water.....	75	[1165]

* Translated for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

** The alternate formulas are not always translations of the grammes into grains in the amounts given but, merely convenient renderings in grains of the relative proportions.

Put about seven ounces avoirdupois of hayseed into a basin, pour hot water over it, and to this add the above ingredients; cover the horse's head with a cloth, and stir its contents thoroughly, so as to facilitate the liberation of the steam. Keep this up for a quarter of an hour. Repeat the treatment once each day.

For Diarrhoea.

DIARRHOEA ELECTUARY.

	Parts.
A.—FOR LIGHT CASES.	
Alum, in coarse powder.....	20
Calamus root, in coarse powder.....	50
Angelica root, in coarse powder.....	50
Worm wood, herb, in coarse powder.....	50
Rye meal.....	50
Water, a sufficient quantity.	

Place a lump, the size of a hen's egg, on the tongue every five hours, between meals.

	Grammes.	Grains.
B.—FOR LIGHT CASES.		
Iron sulphate, in coarse powder..	15	[231]
Althaea, in coarse powder.....	100	[1543]
Water, a sufficient quantity.		

Divide into two doses, and give these within three hours of each other.

	Grammes.	Grains.
C.—FOR LIGHT CASES.		
Oak bark, in coarse powder.....	50	[770]
Alum, in coarse powder.....	10	[154]
Althaea, in coarse powder.....	50	[770]
Rye meal.....	50	[770]
Water, a sufficient quantity.		

Divide into two parts, and give them five hours apart.

	Parts.
D.—FOR DIFFICULT CASES.	
Iron sulphate, in No. 20 powder.....	25
Alum, in No. 20 powder.....	25
Oak bark.....	50
Calamus root.....	50
Rye bread.....	100
Water, a sufficient quantity.	

Place a piece, the size of a hen's egg, upon the tongue every two hours.

PILLS.

	Grammes.	Grains.
A.—FOR LIGHT CASES.		
Alum, in No. 20 powder.....	20	[388]
Althaea, in No. 20 powder.....	35	[539]
Molasses, a sufficient quantity.		

Make two pills, and give them two hours apart.

	Grammes.	Grains.
B.—FOR OBSTINATE CASES.		
Tannin.....	30	[462]
Althaea in No. 20 powder.....	50	[770]
Molasses, a sufficient quantity.		

Divide into three pills and give one pill every evening.

LINIMENT.

	Grammes.	Grains.
Spirit of mustard.....	50	[770]
Oil of turpentine.....	50	[770]
Spirit of soap.....	100	[1540]

Sprinkle half of this on the belly, rub it in and cover with a woolen cloth. Repeat after five hours.

For Tape Worm.

	Grammes.	Grains.
Hirschhorn oil.....	50	[770]
Oil of turpentine.....	50	[770]
Aloes, in No. 20 powder.....	30	[462]
Common soap.....	20	[308]
Rye flour a sufficient quantity.		

Make into four pills and give one pill morning and evening on two successive days.

For Dyspepsia.

DYSPEPSIA POWDER.

	Parts.
Sodium chloride.....	250
Sodium bicarbonate.....	100
Calamus root in No. 20 powder.....	50
Iron in fine powder.....	10
One tablespoonful with each meal.	

For Loss of Appetite.

ELECTUARY.

	Parts.
Crude tartar (argols) in No. 20 powder.....	25
Antimony sulphide, in No. 50 powder.....	15
Calamus root in No. 20 powder.....	100
Gentian root in No. 20 powder.....	100
Juniper berries, crushed.....	100
Caraway seed in No. 20 powder.....	50
Mustard seed in No. 20 powder.....	50
Rye flour.....	50
Water, a sufficient quantity.	

Spread one tablespoonful of this on the horse's tongue three times a day.

APPETITE POWDER.

	Parts.
A.—Gentian root in No. 20 powder.....	300
Sodium sulphate, granular.....	100
Sodium chloride.....	50
Sodium bicarbonate.....	50

Give two tablespoonfuls with each meal.

	Parts.
B.—Gentian root in No. 20 powder.....	100
Wormwood in No. 20 powder.....	100
Hazel root in No. 20 powder.....	50
Artificial carlsbad salt.....	250

Give one tablespoonful after each meal.

	Grammes.	Grains.
C.—Crude tartar (argols).....	30	[462]
Antimony sulphide.....	20	[308]
Potassium bicarbonate.....	50	[770]
Gentian root.....	50	[770]
Caraway seed.....	50	[770]

Mix the ingredients all in the form of a fine powder and divide into ten powders, one of which should be given the horse daily mixed with his feed once.

For Cough.

CATARRH OF THE CHEST OR LUNGS.

COUGH POWDER.

	Parts.
A.—Antimony sulphide in No. 50 powder....	50
Liquorice wood in No. 20 powder.....	100
Sodium chloride.....	250

Two tablespoonfuls after each meal.

	Parts.
B.—Sodium chloride.....	500
Antimony sulphide in No. 50 powder.....	100
Buckthorn berries in No. 20 powder.....	50
Liquorice in No. 20 powder.....	50

Give one tablespoonful after each meal.

COUGH DRENCH.

	Grammes.	Grains.
Ammonium chloride.....	100	[1540]
Antimony sulphide in No. 50 powder.....	50	[770]
Crude tartar (argols) in No. 20 powder.....	40	[616]
Linseed meal.....	300	[4620]

Divide into six doses and give one of these in a mucilaginous drink twice a day.

POULTICE FOR THE CHEST.

	Grammes.	Grains.
Mustard, powdered.....	100	[1540]
Wheat bran.....	900	[13860]

Stir the mixed powders with sufficient water heated to 70 to 75°C. [to F.] to make a poultice in the usual manner.

The addition of the mustard makes the poultice somewhat of a counter-irritant but without being so severe as a strong mustard plaster.

For Colic.

LINIMENT FOR THE ABDOMEN.

	Parts.
Oil of turpentine.....	80
Ammonia water.....	20
Alcohol 90 per cent.....	200

Rub the entire belly of the horse with this liniment. The horse will at first be restless but will become quiet later, a grateful warmth following the application.

COLIC ELECTUARY.

A.—FOR CONSTIPATED CASES.

	Grammes.	Grains.
Antimony sulphide.....	15	[239]
Crude tartar (argols).....	30	[462]
Sodium sulphate, granular.....	200	[3080]
Chamomile in No. 20 powder.....	60	[924]
Rye meal.....	40	[616]
Water, a sufficient quantity.		

Make into an electuary and give in two doses within a half hour of each other.

B.—FOR CONSTIPATED CASES.

	Grammes.	Grains.
Magnesium sulphate.....	500	[7700]
Althaea.....	100	[1540]
Rye flour.....	100	[1540]
Water, a sufficient quantity.		

Make into an electuary and give in two doses within a half hour of each other.

C.—FOR COLIC ACCOMPANIED BY CONSTIPATION AND RETENTION OF URINE.

	Grammes.	Grains.
Sodium sulphate, granular.....	500	[7700]
Rye flour.....	100	[1540]
Juniper berries, in No. 20 powder.....	100	[1540]
Water, a sufficient quantity.		

Make an electuary and give in two doses within a half hour of each other.

D.—FOR COLIC ACCOMPANIED BY DIARRHŒA.

	Grammes.	Grains.
Alum.....	20	[308]
Chamomile.....	50	[770]
Oak bark.....	50	[770]
Juniper berries.....	50	[770]
Molasses, a sufficient quantity.		

Make into a stiff paste and give one-fourth part of it once every hour.

PURGATIVE COLIC PILLS.

	Grammes.	Grains.
Aloes, in No. 20 powder.....	45	[698]
Green soap, a sufficient quantity to mass.		

Make into a pill and give at once on the appearance of the colic.

FOR COLIC ACCOMPANIED BY RETENTION OF URINE.

	Grammes.	Grains.
Juniper berries, crushed.....	150	[2310]
Chamomile.....	30	[462]
Hot water, a sufficient quantity.		

Pour 3 liters (6 quarts) of hot water on the drugs, allow to draw for fifteen minutes and strain through a cloth. Give one-third of the decoction by the mouth and the remainder at once as an injection.

Care of the Hoofs.

Cleanliness of the stall is the first condition necessary to the proper care of the hoofs. The hoofs should also be washed every morning with water, and smeared with some one of the greases mentioned below. This is particularly necessary in the summer time.

HOOF GREASE.

	Parts.
Yellow ceresin.....	15
Liquid yellow paraffin.....	85

B.—

	Parts.
Ozokerite.....	20
Rape seed oil.....	75
Lamp black, or soot.....	5

LANOLIN HOOF GREASE.

	Grammes.	Grains.
Crude wool fat.....	85.0	[1300]
Rape seed oil.....	15.0	[230]
Mirbane oil.....	0.5	[10]
Citronella oil.....	0.3	[5]

SALICYLIC HOOF GREASE.

	Grammes.	Grains.
Tallow.....	50	[770]
Rape seed oil.....	50	[770]
Salicylic acid.....	1	[15]

For Gastric Catarrh.

A.—FOR CHRONIC CASES.

	Parts.
Sodium bicarbonate.....	100
Sodium chloride.....	100
Sodium sulphate, granular.....	100
Juniper berries in No. 20 powder.....	50

One tablespoonful after each meal.

B.—FOR CHRONIC CASES.

	Parts.
Artificial Carlsbad salt.....	500
Linseed meal.....	500

Three times a day give two table-spoonful of the powder in 5 quarts of water as a drink.

C.—FOR ACUTE CASES.

	Parts.
Precipitated chalk.....	150
Sodium chloride.....	150
Genian root, in No. 20 powder.....	50
Fennel seed, in No. 20 powder.....	50

One tablespoonful after each meal.

For Malanders or Grease.

Wash the feet with soapsuds, dry with a cloth, and then moisten with either of the following washes, and bind up with a woolen bandage.

A.—WASH FOR GREASE.

	Parts.
Copper sulphate.....	15
Ferrous sulphate.....	15
Alum.....	20
Water.....	1000

B.—WASH FOR GREASE.

	Parts.
Chlorinated lime.....	50
Sodium chloride.....	10
Water.....	1000

APPLICATION FOR GREASE.

	Parts.
Salicylic acid.....	4
Olive oil.....	200
Carbolic acid.....	2

Dissolve the salicylic acid in the oil by the aid of heat, and add the carbolic acid when cool.

Clean the affected parts thoroughly with soap and water; dry with a cloth, and rub with this oil three times a day.

(To be continued.)

How to Dispense Capsules.

At the last meeting of the Kansas Pharmaceutical Association a paper was read on the above subject. It consisted of the report of the Committee on Queries in reply to this question:

Uniformity in dispensing prescriptions in capsules is desired. Is it best to make a mass, when not specified, in dispensing prescriptions for powders to be inclosed in capsules? What is the general custom?

With a view of ascertaining the practice most generally followed with this kind of prescription, a letter of inquiry

was sent to twenty-five leading druggists in various parts of the United States and the following letters were received in reply.

Invariably Makes a Mass.

We invariably make a mass unless ordered dry, deeming it more cleanly, accurate and expeditious.

MARY H. ECCLES.

Brooklyn, N. Y.

The Boston Custom.

In answer to your query we would say that our practice is to put powders in capsules without making a mass when no directions are given. We understand that to be the general custom in this vicinity.

KELLY & DURKEE.

Boston, Massachusetts.

Dispense in Smallest Capsule Possible.

In reply to your letter would say it is our custom to make a pill mass and then dispense in the smallest capsule possible, the size of the capsule being noted on the prescription. The only exception to the rule of making a mass whether specified or not is in the case of quinine. CHARLES T. P. FENNEL.

Cincinnati, Ohio.

Dispense Irritating Substances in Mass.

In reply to your letter would say that we dispense dry substances in the powdered state, unless otherwise directed by the subscriber, excepting such drugs as capsicum, potassium permanganate and a few others that are of an irritating nature. In such cases we make a mass. R. W. CUTHBERT.

Philadelphia.

Always Make a Mass.

In reply to your letter would say that we always make a mass, unless there is present some ingredient, such as bi-carbonate or carbonates and acids, or some exceedingly soluble salts. If the prescription only calls for six or less capsules, we put them up dry. We always mark copies, as well as the original, "dry," when we so dispense them.

F. W. R. PERRY.

Detroit, Mich.

The Dry Method Preferable.

For more than five years we have put all powders in capsules in dry form whenever practical, and have found this method preferable for several reasons: (1) It requires less time to mix them; (2) the mixture is not apt to undergo any change which causes it to either harden or soften; (3) the dry form furnishes a capsule of more uniform and elegant appearance.

HUGO EYSEL.

Kansas City, Mo.

Massing the Rule in New York.

In reply to your letter I would say that our capsule prescriptions are frequently directed to be made "as small as possible." We find that most prescriptions can be put in smaller capsules by making into a mass. Our rule is to mass such prescriptions, except where there is a large quantity of dry powder that will require an excess of excipient, or where massing would be a detriment therapeutically. Quinine we always fill in capsules dry, first rubbing the quinine to a fine powder.

HERMON W. ATWOOD.

New York.

Boston Favors the Dry Method.

In reply to your letter and query, we are of the opinion that when no special directions are given for making the capsules in a mass before enclosing, it is not desirable to add any moistening matter whatever. It is our custom to endeavor to dispense every prescription exactly as it is written, with the mental reservation of anticipating, sometimes, what is intended by the physician. We think the query will prove an interesting one and tend to greater uniformity in the dispensing of prescriptions.

THEODORE METCALF & CO.

Boston, Mass. By FRANK A. DAVIDSON, President.

Use an Excipient.

Replying to your inquiry in regard to dispensing medicines in capsules, will say that our usual custom is to make a mass when the material is not of too soluble a character. We aim to avoid an excipient that would cause the mass

to become hardened so as to be insoluble in the stomach. When solid extracts are used, as is the case in a very large percentage of capsule prescriptions, it is nearly always necessary to make a mass, hence we think inasmuch as the capsule may be dispensed smaller while massing, it is most satisfactory to generally use an excipient and make a mass when it is practicable. In the case of those of which we keep a large quantity on hand ready for sale, such as quinine capsules, salicine, phenacetine, etc., we put into the capsules dry. In the case of refilling capsule prescriptions we follow our usual custom; sometimes we think it necessary to say to the customer that the prescription may have been previously put up by a different process, but it is only occasionally that a prescription for capsules is filled by us that was previously prepared elsewhere.

J. A. GALLAGHER.

Kansas City, Mo.

BRITISH PHARMACEUTICAL CONFERENCE.

THE annual meeting of the British Pharmaceutical Conference was held this year at Oxford University on August 30th. We publish herewith the papers read there, some being presented in abstract and some complete.

Gravimetric and Volumetric Methods for the Determination of the Alkaloids in Tinctures.

BY F. H. FARR and R. WRIGHT.

The authors in this paper referred to the work done by Lyons, Lloyd, Allen, and Cripps in the direction of volumetric estimations of the alkaloids in tinctures, etc., and then proceeded to the work of Caspari, who, in a note published in the *Pharmaceutical Review*, November, 1892, maintained that volumetric methods of estimation were superior to gravimetric ones, and that the alkaloids obtained by the latter invariably contained from 10 to 20 per cent. of impurity. A final reference was made to a paper read before the American Pharmaceutical Association last year by Messrs. Caspari and Dohme, entitled "The Value of Titration with Volumetric-acid Solution as a Means of Assaying Drugs and Galenical Preparations," in which those gentlemen claim to show that the determination of alkaloids in galenical preparations may be effected more accurately by titration than by the usual plan of weighing.

As Messrs. Farr and Wright in their researches on tinctures had employed gravimetric processes of assay almost exclusively, they considered it necessary to test the conclusions of Messrs. Caspari and Dohme. With that object in view each of the alkaloidal tinctures previously submitted to examination was prepared in sufficient quantity and estimated as follows:

ESTIMATION OF TINCTURES.

1. Two gravimetric estimations by the methods published in their notes on tincture menstrua.
2. The crude alkaloid was extracted from the evaporated tincture by shaking

with chloroform after addition of alkali; it was then purified by extraction from the chloroform with several portions of acidulated water, and finally recovered by addition of alkali and shaking with chloroform. The chloroform solution thus obtained was washed with distilled water to remove any traces of adhering alkali, and then used for the direct titration of the alkaloids with $\frac{N}{50}$ HCl, methyl-orange, iodeosin, and phloxin being used as indicators in the separate experiments. In using methyl-orange a little distilled water is added along with 2 drops of the indicator, but with iodeosin and phloxin a single drop of a 1 per cent. solution is shaken up with the chloroformic solution until the latter has become distinctly colored. The indication of the end-reaction is in the case of methyl-orange the appearance of a pink color in the upper layer, while in the case where iodeosin and phloxin are used the reaction is complete when the color disappears from the chloroform.

3. The alkaloid obtained by the usual gravimetric method was dissolved in a known excess of standard acid and titrated back with standard alkali in a white porcelain dish, using methyl-orange and Brazil wood as indicators, supplemented by iodeosin and phloxin where the volume of tincture permitted. In this case the indication of the end of the reaction when methyl-orange is used is the disappearance of the pink tint; and with Brazil wood the production of a purple color. In the employment of iodeosin and phloxin as indicators, except in direct titration, we have followed the plan recommended by Cripps of adding to the acid alkaloidal solution sufficient neutral ether to form a distinct supernatant layer after being shaken with the solution. At the end of the reaction the aqueous layer becomes pink.

TEST SOLUTIONS USED.

The following were the test solutions used in the work; Standard $\frac{N}{50}$ hydrochloric acid and standard $\frac{N}{50}$ barium hydrate, which is recommended as giving a quicker end-reaction than potassium or sodium hydrate. The strength of the latter must be taken at the commencement of each experiment. The indicators used were as follows:

Methyl-orange: A solution of the strength of one grain per fl. oz. in equal parts of alcohol and water.

Brazil wood: The U. S. P. test solution, made by boiling 50 grammes finely-cut Brazil wood with 100 Cc. water for half an hour, replacing the water evaporated from time to time; the liquor is then cooled, strained, and made up to 100 Cc., and 25 Cc. alcohol added, then the whole filtered.

Iodeosin and Phloxin: An aqueous solution containing one part in 1,000 fluid parts.

The equivalents used were those of the principal alkaloid in each case, except cinchona, nux vomica, and veratrum, where the equivalents are calculated by taking the mean weights of the chief alkaloids.

The results obtained are embodied in the table given below.

NOTES ON THE RESULTS.

The authors conclude from their work that volumetric methods are useless in the case of the alkaloids of aconite, the large proportion of aconine (equivalent .02715) making the readings much too high. Also in the case of preparations of colchicum, on account of the absence of basic properties in the alkaloids colchicine and colchicineine.

For gelsemine they have used the formula $C_{22}H_{25}N_2O_5$, proposed by L. Spiegel, instead of $C_{22}H_{25}N_2O_4$, as proposed by Gerrard, their results being more in accord with the former.

In the titration of the cinchona alkaloids the results obtained were not satisfactory, the end reactions being extremely difficult to observe, and the authors condemn the use of volumetric estimations in the case of these alkaloids.

On the other hand, they consider that in the case of the alkaloids of belladonna, henbane, stramonium, conium, jaborandi, nux vomica, lobelia, and opium the application of the volumetric methods may be made without disadvantage, the results obtained being almost equally reliable and somewhat more expeditious than by gravimetric processes.

The authors give a general process for estimating the alkaloids in tinctures by titration with standard acid. From 25 to 50 Cc. of the tincture (or in the case of hyoscyamus 100 Cc.) to be estimated is evaporated over the water-bath to expel alcohol, a little water being added if necessary. The residual extract is filtered into a separator, and the dish and filter washed. The acid liquid is next shaken with two successive small quantities of chloroform, and the latter drawn off. The separated chloroform is washed with a little acidulated water, and the latter, after separation, added to the contents of the separator,

which are then made alkaline, and the alkaloids taken out by shaking with three successive small quantities of chloroform. The chloroformic solutions are drawn off into a cylinder provided with a good cork, washed with distilled water until free from adhering alkali. A

the dispensing-counter on account of its bulky character and its disposition to produce crumbly masses when combined with other ingredients. Pills freshly prepared with a solution of phosphorus in carbon bisulphide diffused through liquorice-powder are not

pills, I decided to try extraction with carbon bisulphide, oxidation to phosphoric acid, and final titration with standardized uranium solution. This method gave very fair results. A solution of uranium acetate was prepared and titrated against sodic phosphate; its value was found to be 1 Cc. = 0.002-298 phosphorus

TABLE SHOWING COMPARATIVE RESULTS OBTAINED IN ESTIMATING TINCTURES—
(A) GRAVIMETRICALLY, (B) VOLUMETRICALLY.

Tincture.	Alkaloid by Weight. Mean of Two Estimations.	Alkaloid Indicated by Direct Titration of Chloroformic Solu- tion with $\frac{\text{HCl}}{20}$			Alkaloid Indicated by Dissolving Crude Alkaloid in excess $\frac{\text{HCl}}{20}$ and Titrating back with $\frac{\text{Ba2HO}}{100}$			
		Methyl- orange.	Iodeosin.	Phloxin.	Methyl- orange.	Brazil Wood.	Iodeosin.	Phloxin.
Aconite.....	1	.018	.018	.019	.030	....	.018	.018
	2	.014	.019	.022	.022	.022	.022	.025
Belladonna.....	1	.023	.022	.022	.022	.021	.020	.020
	2	.031	.022	.024	.021	.022	.022	.020
Cinchona.....	1	.074	.144	.145	.073	....	.072	.071
	2	.087	.098	.086	.069	....	....	....
Conium.....	1	.047	.042	.042	.042	.042	.042	.042
	2	.019	.017	....	....	....	.016	.015
		(Hydro- chlorate)	....	....	....	....	....	....
Colchicum.....	1	.024	....	....	.005	....	....	.005
	2	.028	....	....	.006	....	.005	....
Gelsemium.....	1	.019	.018	.019	.019	.017	.018	.018
	2	.024	.020	.024	.027	.024	.024	.024
Hyoscyamus.....	1	.005	.005	.005	.005	.005	.005	.005
	2	.009	.010	....	.005	.008	.008	.008
Jaborandi.....	1	.080	.018	.018	.017	.017	.017	.017
	2	.018	.017	.017	.018	.018	.017	.018
Lobelia.....	1	.009	.009	.008	.008	.008	.008	.008
	2	.009	.009	.009	.007	.008	....	....
Nux Vomica.....	1	.043	.044	.043	.043	.042	.041	....
	2	.066	....	....	.066	.066	.065	.065
Opium†.....	1	.100	....	....	.095	.094	.095	.094
	2	.100	....	....	.099	.099	.097	.099
Stramonium.....	1	.011	.011	.011	.011	.011	.010	.010
	2	.017	.017	....	.017	.017	.018	....
Veratrum Viride...	1	.023	.023	.022	.019	.020	.019	....
	2	.027	.020	.022	.023	.021	.024	.019

†For the opium estimations, a solution of anhydrous morphine obtained in estimating the tincture by the B. P. process was employed. This was dissolved in excess of $\frac{\text{HCl}}{20}$

drop of $\frac{\text{HCl}}{20}$ iodeosin or phloxin is then added, and the whole shaken until the chloroform is distinctly tinted; after which $\frac{\text{HCl}}{20}$ is gradually run in from a burette graduated in tenths of a Cc. the mixture being shaken after each addition of acid until the color is discharged from the chloroform. The reading is then taken, and the proportion of alkaloid calculated from the proper equivalent.

The authors in conclusion, while admitting that the application of volumetric methods of estimation to the alkaloids obtained from tinctures is useful as affording a check on the results obtained by gravimetric methods, maintain that the results yielded by the latter are, on the whole, the more reliable of the two, and that gravimetric processes are more suitable for use by the average practical pharmacist.

Note on Phosphorus Pills.

By R. H. PARKER, F.C.S.

Phosphorus pill-mass, prepared with a fatty or resinous basis, beside being troublesome to prepare, difficult to preserve, and in some cases impossible to digest, is often found inconvenient at

open to these objections; it seemed, however, desirable to determine whether such pills are permanent, and contain the full amount of unoxidized phosphorus.

I will first describe in detail the exact method adopted in preparing, for example, two dozen pills:

Phosphorusthe prescribed quantity for 24 pills
Carbon bisulphide..... 30 minims
Liquorice-root in powder 24 grains
Glycerin..... 4 minims
Tragacanth gum, in powder..... 4 grains
Syrup..... a sufficient quantity

Dissolve the phosphorus in the bisulphide; pour the solution upon the liquorice powder in a pill-mortar; stir uniformly within the smallest possible space, by means of a spatula, until the solvent is nearly evaporated. No portion should be allowed to assume an appearance of dryness. As soon as the mixture becomes nearly solid, and while still moist with bisulphide, add a sufficient quantity of syrup to form a soft pill-mass, and incorporate quickly until homogeneous. Any other ingredients prescribed may now be added *secundum artem*, and the mass divided into twenty-four pills without undue exposure. No coating is necessary.

Not finding a recorded method for the determination of free phosphorus in

EXPERIMENT I.

0.2 gramme phosphorus was oxidized with nitric acid in presence of a fragment of iodine, evaporated until nitrous fumes ceased to be evolved, diluted with water, slight excess of sodium bicarbonate added, then acidified with acetic acid, and made up to 229 Cc. with water. Of this solution 40 Cc. = 15.1 Cc. uranium solution—i.e., 0.1986 phosphorus found.

EXPERIMENT II.

0.0472 gramme phosphorus was dissolved in carbon bisulphide, evaporated to dryness, the residue oxidised, and an acetic solution prepared as in Experiment 1, diluted with water to 50 Cc. Of this solution 20 Cc. = 8.1 uranium solution—i.e., 0.0465 phosphorus found.

EXPERIMENT III.

0.4 gramme phosphorus in 2 Cc. carbon bisulphide poured on 6 grammes of liquorice-root powder, and made into 100 pills in the manner described in the early part of this note. Ten of these pills were kneaded in a glass mortar with several successive quantities of carbon bisulphide, the mixed solutions evaporated to dryness, the residue oxidised, an acetic solution prepared as before, and made up to 50 Cc. with water. Of this solution 20 Cc. = 67 Cc. uranium—i.e., 0.0385 phosphorus found. The remainder of these pills, examined in a similar manner at intervals of three months, showed practically no diminution of phosphorus. A sample of pills is on the table, prepared as already described, each containing $\frac{1}{10}$ gr. of phosphorus, and without any kind of coating; they have been kept in an ordinary pill-box, occasionally opened, and the pills handled since January, 1889—a period of nearly six years. They evidently contain the phosphorus exactly as when first made, for the slightest superficial scratch still produces phosphorescence, and a central section exhibits the same phenomenon over the entire surface. These pills rapidly disintegrate even in cold water, and without the assistance of massage.

The conclusions are obvious—that phosphorus pills may be easily prepared by this method without material loss or oxidation, that they are permanent, and that no coating is necessary for their preservation.

Animal Extracts.

C. E. Stuart, B.Sc., pointed out in a paper read before the Oxford meeting of the British Pharmaceutical Conference that healthy animal tissues being aseptic extracts which could be safely used, could be prepared if scrupulous attention were paid to cleanliness and antiseptic conditions. The knives and

forceps used were to be sterilized by heat, glass and other vessels, as also the hands of the worker by washing with 5 per cent. carbolic acid.

THYROID EXTRACT.

The glands, best cut personally from the freshly killed sheep freed from cysts (of fatty, not purulent matter), and non-hypertrophic, were cleaned from fat, etc., sliced thinly, bruised and for every lobe 1 Cc. of glycerin and 1 Cc. of sterilized water added. After standing twenty-four hours the dull-red, thick liquid was strained off through fine calico. For hypodermic use water with 0.5 per cent. of carbolic acid was substituted for the plain water. A powder of good keeping qualities could be made by drying the expressed juice mixed with sugar of milk on glass plates.

As regarded the active principle of the thyroid gland, the author agreed with Dr. Gourlay that there were present nucleo-albumen, but very little proteid, no mucin, proteose nor peptone. At the same time he doubted the possession of any peculiar virtue by the nucleo-albumen. In accordance with the suggestion of Dr. G. Murray, the author made an aqueous extract of 100 lobes, previously digested for weeks in absolute alcohol; the extract evaporated under reduced pressure at 30°C. was poured into 10 vols. of absolute alcohol, the precipitated substance again extracted with water and reprecipitated. The final product weighed 0.792 gramme and experiments upon its activity were being carried out by Dr. Murray.

BRAIN EXTRACT.

The sliced and bruised brain of rabbits (weighing 7.3 to 11.7 grammes) was mixed with 1 Cc. of glycerin and 1 Cc. of $\frac{1}{2}$ -per cent. carbolic acid per gramme and after twenty-four hours' digestion strained with strong pressure through linen. The pinkish-white emulsion (sp. gr. 1.087) had been injected with good effect in neurasthenia, locomotor ataxy, and other nervous cases. It contained a little dissolved proteid and suspended protagon, lecithin, cholestrin and cerebrin. Dr. Althaus (*Lancet*, December 2, 1893) suggested that its action was due to its nature as a highly specialized pabulum of nervous matter and to the decomposition of the lecithin and protagon by the alkali of the blood yielding choline and fatty acids.

SPINAL-CORD EXTRACT.

The cord (average weight, 4.68 grammes), obtained by cutting away the vertebræ and removing the arachnoid, was treated as the brain extract. Dr. Althaus had termed the product "Myeline alpha."

SPLEEN EXTRACT.

The position of the organ was described (behind and across the stomach). its size given as $1\frac{1}{2}$ to $2\frac{1}{2}$ inches long and $\frac{1}{2}$ to $\frac{3}{4}$ inch diameter, and average weight as 0.89 gramme. Each organ was rubbed with enough glycerin and $\frac{1}{2}$ -per cent. carbolic acid (equal parts) to make 1 fl. dr. of extract, which had been used hypodermically (dose 10 minims) in leucocythemia, enlarged spleen, and Hodgkin's disease.

SUPRARENAL EXTRACT.

The average weight of the suprarenal capsule was given as .25 gramme, and bruised in a mortar it had a yellowish-brown granular appearance. Prepared similarly to the preceding, the extract was used (dose 10 minims) in Addison's disease.

PITUITARY-BODY EXTRACT.

The small pink mass at the base of the brain (average weight .75 gramme), free from membrane, was treated as the brain and used in acromegaly.

PANCREAS EXTRACT.

The pancreas of the pig, carefully freed from fat, finely divided, and treated like brain extract, furnished a milky product.

THYMUS EXTRACT.

The gland from a young sheep or pig treated as the brain, yielded a thin whitish extract, used in similar cases to the thyroid, but without much effect.

KIDNEY EXTRACT.

The finely-chopped kidney, freed from excretive matter, was treated like the brain.

BONE-MARROW EXTRACT.

On the hypothesis that red blood-corpuscles are chiefly developed in the red marrow of bones an extract was prepared from the cancellous portion of the bones of the head and femur of the calf, macerating the mass for a few days in 10 vols. of glycerin, and filtering through glass.

ORCHITIC FLUID.

Sheep's testicles, deprived of outer membranes, macerated twenty-four hours in glycerin and boric acid (3 Cc. and 6 Cc. of a .5 solution to each gramme). The mixture was filtered through sterilized paper, and finally sterilized.

The Qualities of a Typical Dentifrice.

Arthur Turner, F.C.S., L.D.S., read a paper bearing the above title at the Oxford meeting of the British Pharmaceutical Conference.

A typical dentifrice was defined as one adapted to general use in contradistinction to powders having special qualities prescribed for use in special cases.

In building up our powder we have first to look for a mechanical base which shall be capable of cleansing the surface of the tooth, without the possibility of doing any chemical or mechanical damage to its structure.

We must bear in mind that the enamel, though the hardest and densest tissue in the body, is not impregnable.

Further, the edge of the enamel-cap is bevelled off, so to speak, becoming thinner as we approach the gum. At the neck of the tooth there is often no enamel at all, and consequently whatever dentifrice is used will here come into contact with a more vulnerable structure—the cementum of the root. We are here referring to a normal healthy tooth.

Let us take care that our mechanical base is of such a nature that its constant use can do no harm to this more delicate part.

Now, we contend that the presence of pumice stone in the base—even if used in small proportion and finely ground—cannot fail to do damage here as well as to the thinner parts of the enamel cap. The hard angles of its particles scratch the surface of the tissues and wear them away.

Charcoal, as a base, is objectionable on account of its color; it is liable to accumulate in the sulcus, between the gum and the cementum, forming an unpleasant-looking dark line. We are compelled, then, in choosing a base to fall back upon our old friends, the chalks of the Pharmacopœia. These fulfil as accurately as possible the required duty.

We clean our teeth then in the same way that we clean our silver and plated goods. Indeed, to test the quality of our mechanical base we might do worse than to clean a new silver spoon with it, and then with the aid of a lens examine the surface of the silver to see whether it has been cut; if it has suffered injury let us by all means try to find a softer base.

To follow out the plate-cleaning idea one might give the fronts of the incisors a final polish with wash leather.

On comparing the claims of the official chalks, we much prefer the "preparata" to the "precipitata" for every particle of the former has been suspended in water by virtue of its own lightness, whereas every crystal of the "precipitata" has been thrown down from a condition of semi-suspension by means of its own greater density.

It may be contended that the precipitated form is not entirely or exclusively crystalline, but it will be admitted that it is composed largely of crystals. The mention of crystalline calcic carbonate makes us think of it in its native form—white marble; and who would think of cleaning a delicate structure with a powder having physical properties in any degree like those of marble?

Having satisfied ourselves, by means of the official test, that the prepared chalk does not contain silica, we have a base as nearly perfect as possible.

The presence of myriads of germs in the saliva is easily proven, and there is danger that lingering traces of either solid or liquid food may become, even in the healthy mouth, both septic in influence and acid in reaction.

We do well to counteract these tendencies by giving our base an increased anti acidity, and also by making it antiseptic, for it is obviously necessary for the well-being of the dental tissues that the fluids of the mouth should be kept alkaline and aseptic.

A small proportion of such an ant-acid as bicarbonate of soda gives the necessary extra alkalinity. Only a small proportion is required, because healthy saliva is itself alkaline and our mechanical base is also slightly so.

For the antiseptic property we plead strongly for the use of oil of cinnamon. It is free from the objectionable qualities of the harsher antiseptics, such as

carbolic acid or eucalyptus oil. Experiments prove it to be an efficient germ-killer. We do not think its antiseptic powers are sufficiently valued. Moreover used in proper proportion, it is pleasant to the mouth and imparts a most delightful sensation of cleanliness and sweetness.

Should the typical dentifrice contain an astringent? We think not. Most astringents are unpleasant, and consequently should be omitted, if only for the sake of the children who will be expected to use it.

We leave the embellishing of the preparation entirely to the skill of the pharmacist. As to color, we see no objection to whiteness. If this be unpopular let us be careful to use only harmless and neutral tinting ingredients.

We welcome the fashion of putting up the dentifrice in wide-mouthed bottles with sprinklers, and condemn any method of putting up where there is a temptation to dip the wet brush into the powder.

We advise putting the *fullest directions* on the label. These should include the rinsing of the mouth with water after the use of the powder, and advice as to the use of a soft brush. Warm water is indispensable in winter, especially for children. If the powder be only used once a day, bed-time is better than morning—but both are to be preferred.

The Recovery of Residual Tinctures from Marc.

By R. H. PARKER, F. C. S.

The best method for recovering the residual tincture contained in a marc will depend chiefly upon the quantity under operation and the kind of apparatus available. I propose to consider the question as though preparing from 1 to 4 pints of tinctures, etc., with such apparatus as may be found in any pharmacy. Two methods are available for the purpose in view: pressure and displacement by water; distillation being applicable to larger operations only.

PRESSURE.

This process is simple and expeditious, but the use of the ordinary tincture-press leaves much to be desired. The best results are obtained when the quantity of marc reaches the maximum capacity of the press. In a recent experiment with 6 pints of tincture of orange, the tincture when filtered was only 4 oz. short of the full quantity, and the marc lost by drying 5½ oz. A similar quantity of tinct. gent. co. gave 6 pints of product less 3¼ oz. and the marc lost in drying 6 oz., showing that the loss can easily be confined to what actually remains in the marc. If the power be hydraulic, the marc still retains enough alcohol to repay recovery by distillation when working on a large scale. For increasing the efficacy of the ordinary tincture-press after the modern improvements in the mechanical arrangement of the screw-power, the cups for receiving the marc should be narrowed, and several sizes should be

adapted to the same press, so that whatever quantity of marc is in hand, a cup can be selected in which the vertical space occupied by the marc will be much greater than the horizontal.

DISPLACEMENT BY WATER.

A critical examination of this process does not appear to have been recorded; probably, however, many pharmacists have made sufficient observations upon its practice for their own guidance in the laboratory.

The use of water for downward displacement of tinctures dates as far back as 1816, when Réal's filter-press was introduced.

The results of a systematic application of the method to the preparation of tinctures generally was submitted to the British Pharmaceutical Conference at Brighton (1872) by Stoddart and Tucker, in an elaborate paper detailing the comparative examination of 47 tinctures, each prepared by three different processes—viz., (1) maceration only; (2) the pharmacopoeial combination of maceration and percolation; and (3) percolation with displacement by water. Each of these processes yielded a fair proportion of the best results as regards percentage of extractive, but it was not shown whether displacement by water produced a tincture of diminished alcoholic strength.

The use of water for upward displacement was described by Elborne in 1880. His results were fairly good, and might be considerably improved by a modification of his apparatus. In this instance also no determination was made of the alcoholic strength of the finished tincture.

In order to estimate the value and practicability of displacement by water, I will deal particularly with critical observations on the phenomena involved in the practice of displacement generally, directing attention chiefly

must be considered in the light of movement through capillary tubes, where hydrostatic and hydrodynamic effects are either largely discounted or altogether overbalanced by cohesive force, adhesive force, and capillarity. The effect of pressure, too is often wrongly estimated; as a matter of fact, if the internal resistance of the marc be uniform, the only effect of pressure is to modify the rapidity of the process. In other words, with a given speed of percolation, it matters not what pressure is needed to produce it. The essential condition being that the rate of percolation shall be such that the fluid shall not pass between the particles at a greater speed than it can permeate through their tissues.

Displacement may be aptly contemplated by imagining two superposed fluids passing steadily through a vertical tube, a considerable portion of which is filled with a porous solid; evidently admixture of the fluids will increase with the speed of the process, while diffusion, and especially admixture due to currents induced by varying temperatures, will be less in the presence of the marc than in its absence.

I. Displacement by Water—"Downward" v. "Upward."

Two parallel experiments were conducted. In each case 2 oz. cort. cinchonæ flav. (in No. 40 powder) and 10 oz. proof spirit were mixed in a 12-oz. bottle, and occasionally agitated during three or four days, then poured into a glass tube percolator (2 feet long, 1 inch wide), having muslin tied over the lower end and resting in a funnel and bottle-receiver. As soon as the marc filled the tube, and without allowing the liquid to drain away, the upper end was closed with a perforated cork carrying a tube connected with a water-supply.

TINCT. CINCHONÆ FLAV.

Downward Displacement				Upward Displacement			
	Sp. Gr.	Percolate.			Sp. Gr.		
		Quantity.	No.	Quantity.			
Total, 9.2 oz.	.9333	6¼ oz.	0	6¼ oz.	.9323	Total, 9.3 oz.	
S. G., .9316	.9337	1 "	1	1 "	.9324	S. G., .9319	
Solid } 3.55	.9328	1 "	2	1 "	.9323	Solid } 3.60	
Residue } p.c.	.9327	3 drs.	3	3 drs.	.9320	Residue } p.c.	
	.9326	"	4	"	.9319		
	.9333	"	5	"	.9334		
¼ color of "5"	.9523	"	6	"	.9563	¼ color of "5"	
Tinted	.9726	"	7	"	.9773	Tinted	
Pale straw	.9800	"	8	"	.9896	Pale straw	
Nearly colorless	.9840	"	9	"	.9930	Nearly colorless	
	.9869	"	10	"	.9981		

to the contact-surface of the two liquids and their deportment during passage through the marc.

I may say here that the discussion of the principles concerned in percolation and displacement is frequently confined to a consideration of the well-known laws of hydrostatics and hydrodynamics, as though the marc were a limpid fluid; whereas its influence is precisely as though it were a porous solid, and the passage of the liquid through it

The displacement occupied five or six hours; the difference in color and gravity of fractions 5 and 6 was evident to the eye; the loss was comparatively small. The reversal of the direction of displacement has no practical effect on the result. Fractions 5, 6, 7, and 8 of each series, showing the overlapping at the juncture of the fluids, are on the table; it will be observed that the precision of displacement is similar in both cases.

The preceding table indicates the specific gravities of the fractions collected, "0" being the original percolate before displacement commenced:—

II. Displacement by Water vs. Displacement by Alcohol.

Strong tincture of ginger was displaced by alcohol, and this in turn by water.

Twenty ounces powdered ginger was stirred with 40 oz. of rectified spirit until completely exhausted, allowed to percolate, then displaced with 40 oz. of rectified spirit, which was followed by water and the percolate collected in fractions, the gravities of which are tabulated.

STRONGER TINCTURE OF GINGER.

Days	Percolate	Sp. Gr.	
	No. Oz.		
1	0 24 3/4	.8432	40 3/4 oz. A. ("Tincture.")
2	1 8	.8427	
3	2 5	.8427	
4	3 1 1/2	.8435	
5	4 1 1/2	.8435	
6	5 1 1/2	.8427	
7	6 1 1/2	.8413	
8	7 2	.8395	
9	8 6	.8381	
10	9 7	.8347	
11	10 6	.8341	5, same color as 4 6, lighter color than 5 7, half color of 6 8, two-thirds color of 7 9, two-thirds color of 8 10, two-thirds color of 9 39 3/4 oz. B ("Alcohol.")
12	11 3	.8340	
13	12 3 1/2	.8343	
14	13 2 1/2	.8344	
15	14 3 1/2	.8348	
16	15 1 1/2	.8345	
17	16 1 1/2	.8344	
18	17 1 1/2	.8346	
19	18 3 1/2	.8344	
20	19 3 1/2	.8398	

In one experiment the water was forced in at the top, and the displaced tincture collected in fractions at the bottom.

In the other case the water was forced in at the bottom and the displaced tincture collected in fractions at the top.

The sketch illustrates the process.

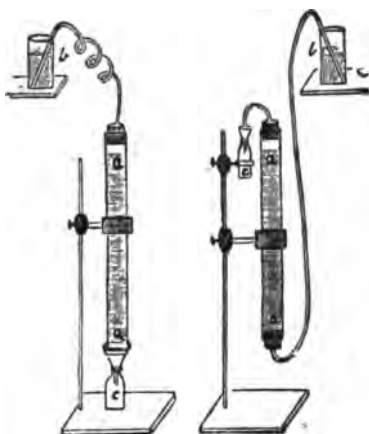
The percolates as far as No. 4 were bulked as "tincture," (No. 5 might have been included, but over 40 oz. had already been collected); this gradually shaded off into the alcohol without any sharp line of division. The second series of percolates (B) was entirely alcoholic; the water following it would not pass through the muslin. The entire volume of spirit used was recovered without loss. The juncture surface between tincture and alcohol was not visible in the marc, but a distinct brown line encircling the percolator always evidenced the position and progress of the water through it. Comparing the mixed tincture percolates (A) with the mixed alcohol percolates (B), the former was about five times the color and about twelve times the pungency of the latter.

Very similar results were obtained in an experiment with 32 oz. of powdered belladonna-root stirred with 48 oz. of rectified spirit until exhausted, allowed to percolate, then displaced with another 48 oz. rectified spirit, which in turn was followed by water, and the percolate collected in fractions as before.

LINIM. BELLADONNÆ.

Days	Percolate	Sp. Gr.	
	No. Oz.		
1	0 13 1/4	.8522	46 1/2 oz. "Liniment."
2	1 20	.8522	
3	2 7	.8523	
4	3 3	.8522	
5	4 3	.8523	
6	5 3	.8515	
7	6 3	.8499	
8	7 3	.8486	
9	8 3	.8474	
10	9 3	.8455	
11	10 15	.8422	5 to 8 color dimin- 48 oz. "Alcohol"
12	11 11 1/2	.8418	
13	12 8	.8412	
14	13 8	.8432	
15	14 3/4	.8495	
16	15 3/4	.8878	
17	16 2 1/2	1.1082	
			9, half color of 0; 10 to 13 similar, lighter than 9.
			14, double color of 13; bright.
			15, cloudy.
			16, thick, black syrup containing about 25 p.c. alcohol.

It will be seen from the following that a uniform liniment percolated as far as fraction No. 4, when it gradually thinned off into the alcohol down to fraction No. 9. No water appeared in the percolate until after No. 15, by which time 95 oz. had been collected out of 96 oz. taken at the commencement. A black line round the marc always indi-



"DOWNWARD" VS. "UPWARD" DISPLACEMENT.

- Glass tube filled with marc.
- Pressure-water supply.
- Bottle to collect displaced tincture.

cated the exact position of the water, and its first appearance in the percolate was readily observed by watching the transparency of the falling drops. The last drop of No. 15 was limpid and spirituous; the first drop of No. 16 was like black treacle.

LINIM. ACONITI.

A similar experiment with linim. aconiti gave almost identical results, the loss of spirit being only 1 oz. in operating on 20 oz. of root.

III. Proof Spirit Displaced by Water.

In preparing 4 pints of tinct. cinchonæ co., the saffron was used in its ordinary condition, the orange-peel replaced by an equivalent of tinct. aurant., the bark, serpentary, and cochineal in No. 40 powder; the whole of the men-

strum added, and frequently agitated in a stoppered bottle for six days, transferred to percolator, the tincture re-percolated until bright, then followed by water, and the percolate collected in fractions.

TINCT. CINCHONÆ CO.

Hours	Percolate	Sp. Gr.	
	No. Oz.		
	0 63 3/4	.947	"Tincture," 78 3/4 oz.; all bright.
	1 3	.947	
	2 3	.947	
	3 3	.947	
	4 3	.947	
	5 3	.947	
	6 1	.978	
	7 3	.991	
	8 3	.997	
			Cloudy; much lighter; some ppt.
			Cloudy; very light; scarcely ppt.
			Clear; half color tinct. aurant.; no ppt.

50 Cc. of No. 7, boiled off and made up with water, gained weight 1-3.

50 Cc. of No. 8, boiled off and made up with water, gained weight 0-88.

In this case displacement is fairly good—the loss of alcohol 1 1/4 oz. on 80 oz. The position of the water was scarcely visible in the marc, and its appearance in the percolate could only be observed on placing the fractions side by side; then it was clearly evident. The alteration in gravity was immediately visible on pouring a small quantity of one fraction into a previous one held between the eye and a strong light.

Four pints of tinct. rhei co. manipulated in a similar manner gave the following results:

TINCT. RHEI CO.

Days	Percolate	Sp. Gr.	
	No. Oz.		
1	0 61 1/2	.9351	74 oz. "Tincture."
2	1 5	.9353	
3	2 1	.9368	
4	3 1	.9367	
5	4 1	.9364	
6	5 3/4	.9380	
7	6 3/4	.9380	
8	7 3/4	.9375	
9	8 3/4	.9375	
10	9 3/4	.9375	
11	10 3/4	.9372	13. Clear, limpid. 14. Cloudy, syrupy.
12	11 3/4	.9373	
13	12 3/4	.9373	
14	13 3/4	.9434	
15	14 3/4	.9764	

This experiment was unsatisfactory, the displacement being so slow that the watery contents of the percolator required occasional stirring in order to facilitate the process. This perhaps accounts somewhat for the comparatively large deficiency (6 oz. on 80 oz.). The tincture, however, was faultless.

TINCT. CHIRATÆ.

The ingredients for 32 oz. of this tincture were macerated for four days, then percolated in a cylindrical chimney-glass, the lower end of which was

tied over with muslin. The fractions of percolate had the following characters:

Days.	Percolate.	Sp. Gr.	
	No. Oz.		
1	0 21½	.9219	Tincture, 30 oz.
2	1 4	.9286	
3	2 1	.9311	
4	3 1	.9282	
5	4 1	.9231	Slightly opalescent.
6	5 1½	.9226	
7	6 1	.9327	
8	7 ½	.9776	
9	8 ½	.9876	Darker color than 0; "bright," but slight sediment on keeping.
10	9 ½	.9936	
11	10 ½	.9979	
12	11 ½	.9937	
13	12 ½	1.0001	Same color as 0 still very bitter.
14	13 3	1.0360	

In this case the sp. gr. shows the displacement to be precise, but it required close comparative examination of the fractions placed in the order of collection to find where tincture ceased and water followed. It was, however, unmistakable by the permanent slight opalescence of No. 6, and the darker color of subsequent fractions. At a glance all the fractions seemed alike. The continued bitterness in the marc after No. 13 clearly indicates that the B.P. formula by no means exhausts the herb.

TINCT. OPII.

The marc from 4 pints of this tincture after percolation was displaced by water with the following results:

Percolate.	Sp. Gr.	
No. Oz.		
0	— .930	Bright. All same color.
1	2 .960	
2	2 .932	
3	2 .968	
4	2 .968	Lighter; trace deposit.
5	2 1.006	Much lighter; some deposit.
6	2 1.008	Very much lighter; less deposit.

50 Cc. No. 4 boiled off and made up with water gained weight 1.68.

50 Cc. No. 6 boiled off and made up with water gained weight 0.85.

No line of demarcation was visible; percolation at first was rapid, Nos. 5 and 6 very slow.

IV. Chloroform Displaced by Water.

Thirty fluid ounces of chloroformum belladonnae, B.P.C., were prepared and the fluid displaced by water; the progress of the latter in the marc was clearly visible, and the last percolate of chloroform was tardily followed by a black syrupy extract, which, of course, had no tendency to mix with the displaced fluid. The product was 6½ oz. less than the original volume of chloroform taken. The loss may partly be accounted for by the high temperature of the laboratory in July (76° F.).

DEDUCTIONS DRAWN.

The following deductions may be made from an examination of these tables:

(1) That the precision of displacement depends not upon the relative position of the superposed fluids, but upon their relative affinities and miscibility at the contact surface; an al-

coholic solution being more perfectly displaced by water than by alcohol, especially if each fluid holds in solution a substance insoluble in the other, as in alcoholic percolates of ginger, belladonna, aconite, etc.

(2) In the downward displacement of alcoholic tinctures by water, diffusion of the latter into the tincture in advance of the rate of percolation takes place to an inconsiderable extent only.

CONCLUSION.

The preparation of tinctures, liniments, etc., by percolation and displacement by water, is much more economical than by screw-pressure of the marc;

(3) The most important point of all is that the marc shall be entirely free from air-spaces and air-channels. To ensure this, particular attention must be paid to the method of packing the marc, and the precise moment when water should be superposed. This marc should be stirred in the percolator with sufficient menstruum to form a semi-fluid mixture; when quite uniform and free from air-holes, it should be allowed to drain, occasionally jarring the side of the percolator against the hand until it acquires solidity; water should be immediately floated on so as not to disturb the marc. A convenient method is to

TABLE SHOWING RESULTS OF ESTIMATIONS OF ALKALOIDAL TINCTURES.

Tincture.	Date of First Estimation.	Percentage of Alkaloid.	Date of Second Estimation.	Percentage of Alkaloid.
Aconite.....	1 Jan. 6, 1891	.064	March, 1894	.064
	2 Jan. 9, 1891	.150	Dec. 7, 1893	.048
	3 Jan. 9, 1891	.066	Dec. 8, 1893	.060
Average.....	....	.036	....	.034
Belladonna.....	1 Aug. 18, 1891	.024	March, 1894	.024
	2 Aug. 18, 1891	.026	March, 1894	.025
	3 Aug. 24, 1891	.039	Nov. 14, 1893	.039
	4 Aug. 24, 1891	.038	Nov. 14, 1893	.038
Average.....	....	.033	....	.032
Cinchona.....	March, 1893	1.29	April, 1894	1.27
	March 27, 1893	1.00	Feb. 23, 1894	.96
Average.....	....	1.14	....	1.11
Colchicum.....	1 Nov. 14, 1890	.096	April, 1894	.092
	2 Nov. 14, 1890	.058	April, 1894	.058
	3 Dec. 9, 1890	.079	Dec. 21, 1893	.060
	4 Dec. 9, 1890	.080	Dec. 19, 1893	.076
Average.....	....	.078	....	.077
Conium.....	1 Oct. 6, 1890	.158	March, 1894	.154
	2 Oct. 16, 1890	.080	Dec. 15, 1893	.080
	3 Oct. 16, 1890	.088	Dec. 15, 1893	.086
Average.....	....	.115	....	.113
Gelsemium.....	1 Oct. 22, 1891	.020	April, 1894	.019
	2 Oct. 16, 1891	.047	Nov. 20, 1893	.048
	3 Oct. 16, 1891	.058	Dec. 5, 1893	.066
Average.....	....	.045	....	.044
Hyoecyamus.....	1 July 23, 1891	.012	March, 1894	.012
	2 July 23, 1891	.011	March, 1894	.011
	3 Mar. 20, 1891	.013	Nov. 17, 1893	.0125
	4 Mar. 20, 1891	.0135	Nov. 17, 1893	.013
Average.....	....	.0124	....	.0121
Jaborandi.....	1 Feb. 14, 1891	.112	March, 1894	.106
	2 Feb. 14, 1891	.090	March, 1894	.081
	3 Feb. 16, 1891	.124	Nov. 28, 1893	.130
	4 Feb. 16, 1891	.140	Nov. 28, 1893	.136
Average.....	....	.116	....	.113
Lobelia.....	1 July, 1892	.028	April, 1894	.029
	2 July 22, 1892	.044	Nov. 21, 1893	.044
	3 July 22, 1892	.042	Nov. 22, 1893	.041
Average.....	....	.038	....	.038
Stramonium.....	1 Sept., 1891	.032	March, 1894	.033
	2 Sept., 1891	.030	March, 1894	.030
	3 Sept., 1891	.027	March, 1894	.028
	4 Sept., 1891	.030	March, 1894	.029
Average.....	....	.030	....	.030
Veratrum Viride.....	1 July, 1892	.184	April, 1894	.176
	2 July, 1892	.212	April, 1894	.199
	3 Dec. 15, 1891	.140	Dec. 9, 1893	.138
	4 Dec. 15, 1891	.158	Dec. 12, 1893	.150
Average.....	....	.173	....	.164

the process is quite reliable if carefully conducted, but is better adapted to stronger spirituous preparations than to proof-spirit compounds. It is, perhaps, needless to point out that the method is unsuitable for operations on a large scale.

POINTS TO BE OBSERVED.

(1) The materials should be in fairly uniform powder; No. 20 for porous, readily permeable substances; No. 40, or finer, for drugs of denser structure.

(2) The ingredients should be freely macerated in the whole of the menstruum (either stirred in the percolator or agitated in a bottle) until extraction is complete.

pour the water through a funnel into the inverted lid of an ointment-pot, previously laid on the surface of the marc.

(4) The displacement should not be rapid, and the percolate should be collected in relatively small fractions when the total quantity approaches completion—cloudiness, altered gravity, and color indicating the termination of the process.

The Stability of the Alkaloidal Tinctures.

BY E. H. FARR AND R. WRIGHT.

The question of the stability, or otherwise, of galenical preparations, like the

tinctures, is of considerable importance from a medical and pharmaceutical point of view, because it is evident that in so far as such preparations are liable to undergo alteration in composition, either through the separating out of any of the principal constituents, or through changes taking place in the characters and properties of any of the active principles, by so much will the preparations themselves be rendered uncertain in strength, and, consequently, unreliable in effect. The question assumes an added importance on account of the present disposition of opinion in favor of standardized preparations; and still more so in view of the fact that it is more than probable that the publication of the forthcoming edition of the British Pharmacopoeia may witness a considerable extension in the application of the principle of standardization to preparations of potent drugs.

Now, if it were proved impossible to keep a preparation after being standardized up to standard strength, this fact would in itself constitute a great, if not an insuperable, barrier in the way of carrying out any such system of standardization as we have advocated for several years past. During the progress of our work on tinctures we, therefore, took the precaution to preserve specimens of each of the tinctures operated upon, intending, as soon as time and opportunity would allow, to turn our attention to the question as to whether or not those tinctures, the active principles of which are capable of ready and accurate estimation, suffered any diminution in strength when kept for a time. We also thought that inferentially the results of this inquiry might tend to throw light upon the same question in its application to other tinctures not brought under examination, or at any rate that they might not be without interest in their bearing on that point.

All the tinctures examined have been kept for 12 months at least, the majority of them for a space of two or three years. The processes employed for the determination of the alkaloids have been precisely the same as those originally followed, and will be found published in the individual papers, references to which are given in the Year-Books for 1890-3.

The results obtained prove that the strength of the alkaloidal tinctures, so far as can be judged from the estimation of their alkaloidal constituents, remains approximately the same for a considerable length of time, and it may fairly be assumed that when preserved under normal conditions they remain constant in composition. The only instances in which any notable loss of alkaloid is apparent are in the case of the tinctures of cinchona and green hellebore, and it is doubtless due to the mechanical carrying in solution of traces of alkaloid by deposited resinous and extractive matter. The average loss in the most extreme case, that of the tincture of green hellebore, does not amount to 5 per cent.

FOR PRURITUS.

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Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Hair curling fluid.—H. J. F.—The following will be found useful:

Powdered acacia.....	20 grains.
Sodium borate.....	2 drams.
Hot water.....	6 ounces.
Spirit of camphor.....	3½ drams.
Cold water, up to.....	10 ounces.

Freckle lotion.—H. J. F., writes: Please publish a formula for freckles, something that will not harm the skin.

A weak alkaline solution is generally recommended for the removal of freckles. Corrosive sublimate is also deemed of value but the use of any chemical preparation is attended with some risk and the pharmacist should assume no responsibility for their action. Below we give a few examples of the freckle lotions considered of most value.

FRECKLE MILK.

Camphor.....	7 drams.
Ammonium chloride.....	3 drams.
Corrosive sublimate.....	7 grains.
Albumen.....	14 drams.
Rose water.....	1 pint.

FRECKLE WASH.

Potassium carbonate.....	7 ounces.
Water.....	2 pints.
Rose water.....	7 ounces.
Alcohol.....	3½ ounces.
Oil of rose.....	75 drops.
Oil of Cinnamon.....	35 drops.

FRECKLE LOTION.

Rose water.....	2 pints.
Orange flower water.....	1 pint.
Glycerin.....	6 ounces.
Potassium carbonate.....	14 drams.
Tincture of benzoin.....	6 drams.

Deodorization of Fusel Oil.—J. C. B.—We do not think the deodorization of fusel oil can be accomplished without altering the chemical constitution of the oil. The objectionable odor of the oil can be lessened to some extent by re-distillation. As to a suitable perfume for masking the odor we would recommend the use of the more pronounced flavors, such as oil of mirbane, citronella, or verbena, with musk, clove and cinnamon in preference to the finer odors.

Cloudy Ammonia.—G. W. M.—This is prepared as follows:

	Parts.
Potassium carbonate.....	1
Sodium borate.....	1
Green soap.....	1½
Stronger water of ammonia.....	4
Distilled water.....	8

Heat the water and dissolve in it the soap and potassium carbonate, then add the borax, and when cold the stronger ammonia water.

Sallade's Mosquito Bite Cure—H. A.—From a superficial examination of this article we are of the opinion that it consists largely of deodorized kerosene, scented with oil of cassia. A little experimenting on your part should result in the production of a compound resembling the one required.

Bleaching sponges.—J. W. M.—The sponges to be bleached are first deprived of their sand and other obvious impurities or damaged portions by beating, washing or trimming, and then soaked in a 1 per cent. solution of potassium permanganate for about 15 minutes. They are then removed and washed with water until the latter runs off colorless. The sponges are next placed in a solution of sodium hyposulphate containing 1 troy ounce to the pint. To this solution is added hydrochloric acid in the proportion of 1 fluid ounce of acid diluted with 4 fluid ounces of water for every pint of the last mentioned solution. The sponges are macerated in this liquid for about 15 minutes or until sufficiently bleached. They are then removed and washed thoroughly with water.

Florida water.—R. F. M.—A formula for a cheap Florida water is given on page 127 in the March 15 issue. The formulas given below will be found to furnish satisfactory waters:

I.

Oil neroli.....	30 minims.
Oil lemon.....	1 fl. ounce.
Oil bergamot.....	3 fl. ounces.
Oil lavender.....	1 fl. ounce.
Oil cinnamon.....	½ fl. drams.
Oil cloves.....	1½ fl. drams.
Essence musk.....	2 fl. ounces.
Essence jessamin.....	6 fl. ounces.
Rose water.....	1 pint.
Cologne spirits.....	8 pints.

Mix and macerate four days with occasional agitation; then filter.

II.

Oil lemon-grass.....	2 fl. drams.
Oil cloves.....	4 fl. drams.
Oil lemon.....	6 fl. drams.
Oil lavender (English).....	1 fl. ounce.
Distilled water.....	1 pint.
Alcohol.....	4 pints.

Asthma Cure.—R. F. M.—We do not know "Peek's cure." The formulas given below are types of the "cures" in common use:

ASTHMA POWDER.

Anise.....	1 dram
Eucalyptus.....	1 ounce
Tea.....	1 ounce
Cannabis Indica.....	1 ounce
Lobelia.....	1 ounce
Potassium nitrate.....	1½ ounces
Stramonium.....	2 ounces

Reduce all to powder, and pass through a medium mesh sieve. It is most important that the potassium nitrate be thoroughly mixed with all the other ingredients; and if this is not possible by trituration, it should be dissolved in a little water and the vegetable powders well moistened with it and then dried.

ASTHMA MIXTURE.

Fld. ext. grindelia robusta.....	2 drams
Potassium iodide.....	1 dram
Tincture opium.....	2 drams
Spirit ether comp.....	½—1 ounce
Syrup wild cherry.....	up to 4 ounces

Dose.—Two teaspoonfuls.

This does not form an agreeable compound; but it is much esteemed by those who have used it.

Household Ammonia.—F. T. W.—The article bearing this name is said to be a solution of sodium oleate in ammonia water, but we are unable to give you a definite formula.

Bibliography.

PRACTICAL BOTANY FOR BEGINNERS.—By F. O. Bower, D. Sc., F.R.S., Regius Professor of Botany in the University of Glasgow. London and New York: Macmillan and Co. 90c.

During the past ten years a great many writers and educators have been endeavoring to write practical Botany for the beginner. In the United States the most successful book, probably, has been Bastin's "Elements of Botany." As an elementary book the latter is appreciated by teacher and student. In the work before us we have one that is intensely practical and which contains a vast deal of "boiled down" information which, with an efficient teacher, is likely to be of great help to beginners in the study of botany as well as instructive. There is not a school of pharmacy, however, nor a high school and very few of our universities where a more thorough course in mathematical botany is given than that outlined by Professor Bower, and yet it is truly but the beginning of the subject. Every pharmacist should be familiar with the facts or at least have been instructed in the points contained in this work. While we recommend this book as one greatly to be desired by the pharmacist yet we deplore the existing conditions in this country that without a competent teacher this excellent work will not seem designed "for Beginners." There is so much contained in this work of 275 pages, however, that even a beginner will obtain so much information and instruction that we welcome this work, especially as it leads to the larger text-book of Prof. Bower, a "Course of Practical Instruction in Botany."

The author employs type-teaching, which is so prevalent with good results in the study of zoology. The introductory chapters are devoted to the making of preparations, adjustment of the microscope, practical exercises involving simple methods of preparation, and common microchemical reactions. This portion of thirty-three pages is exceedingly simple and easy of comprehension to the student trained to acts of precision and whose knowledge is rather broad and varied. The author then describes the phanerogams and begins with the angiosperms; vegetative organs of dicotyledons, the herbaceous type. The Sunflower is taken for the example. Examinations are made of the mature stem, then the young stem, and finally the apical bud. Then follows the arboreal type, in the study of which, Elm (*Ulmus campestris*) is employed. Then follows the aquatic type of stem—*Hippuris* being taken. Then follow short chapters on sieve tubes and laticiferous tissues. The leaf is then studied bifacial type, petiole, lamina, leaf-scars, and fall of leaf.

The root is divided into the herbaceous type, and the ligneous type. The apex is also studied.

The monocotyledons are considered in a similar manner to the dicotyledons. The study of the reproductive organs is taken up in the following order: Observations with the naked eye; development of the flower, calyx and corolla, the stamens, and ovules, fertilization, development of the embryo and endosperm, mature seed and embryo, etc.

He not only considers the gymnosperms but also the Lycopodiaceæ, Filiciaceæ, Musci, Hepaticæ, Algæ and Fungi in a similar manner, employing types to ascertain their general morphological and anatomic characters.

An appendix is added containing a list of reagents, their preparation and uses, together with a list of the reactions of bodies commonly found composing the tissues of plants.

For the exceeding simplicity and clearness of the work, we refer to the chapter on the root, where he employs three illustrations showing the disposition of tissues in the young root of a dicotyledon before the cambial division begins; the same at a later stage when the cambium is to be clearly recognized and the arrangement of tissue in the root after secondary thickening has been in progress for a considerable time. For thoroughness of work and terseness of expression, we must refer the reader to the derivation of the tissues of the xylem and phloem from the cambium. The work is worthy of careful study by teachers and of introduction into all schools where botany is taught.

THE GRAPHIC HISTORY OF THE FAIR, containing a sketch of international Expositions, a review of the events leading to the discovery of America, and a history of the World's Columbian Exposition held in the city of Chicago, State of Illinois, May 1 to October 31, 1893. With nearly one thousand illustrations. Chicago: The Graphic Company, 318 Dearborn street, 1894. pp. 9-240. Cloth \$4; half morocco, \$5; full morocco, \$6; edition de luxe, \$10.

This is a work of sterling merit to which it is impossible to do real justice in narrative description. Next to having seen the great Fair itself we can imagine no better way of obtaining a faithful impression of what its scope and beauties were like than in turning over the pages of some such portfolio of pictures as is represented in the "Graphic History of the Fair." By means of this handsome collection of pictures, everything of beauty, utility and of interest which went to make up the famed "White City" is brought clearly into view; and to those who were denied the pleasure of visiting the Exposition no better advice can be given than to procure a copy. At the hands of those who were fortunate enough to visit the Exposition in the full tide of its perfection, the work is sure to find a warm welcome.

The publishers appear to have spared neither labor nor expense in producing a truly complete and attractive history of the Exposition. The book measures 11 x 16 inches, and contains 240 pages, with over thirteen hundred illustrations on enamel finish paper. The publishers are prepared to send the volume by mail or express prepaid on receipt of 40 cents in addition to the published price.

THE BLOT UPON THE BRAIN: Studies in History and Psychology. By William W. Ireland, M.D. Edin. Second edition. New York: G. P. Putnam's Sons, 1893. \$2.50.

This work embraces, with other subjects, an exceedingly interesting series of historical psychological studies, and is remarkable throughout for the erudition displayed by the author. It is a work which may be studied with advantage by readers of all classes.

A GOOD INJECTION FOR LEUCORRHOEA: (Presse Med. Belg.)

Pot. chloratis..... 3 iij
Tinct. opii..... 3 ijs
Aq. picis..... 3 ix

M. Two or three tablespoonfuls of this solution in a quart of hot water may be used as an injection morning and evening, to correct the odor of leucorrhœal discharges which accompanies some cases of endometritis, polypus, fibrous growths, ulceration of the cervix uteri, and even simple vaginitis. The injection should last five or six minutes each time.

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 15, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

PRIZE WINNERS.

A CAREFUL canvas of the ratings made by the contestants in the Quiz Box competition which closed with the answers published in the issue of August 10, shows a number of ratings of so nearly a uniform degree of excellence as to render the task of final award somewhat difficult.

The manner in which the answers were submitted was taken into consideration, however, in finally determining, as it was argued that the care, method, and neatness shown in some of the manuscripts would prove of value at the prescription counter and might therefore with fairness be considered as bearing on the standing of the candidate. Taking all the various factors into consideration, therefore, the following awards have been decided upon:

The First Prize.

A new Dispensatory, latest revised edition, awarded to the person who made the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

To (4. C. HODGES, Syracuse, N. Y.

The Second Prize.

Copies of Harrop's "Monograph on Flavoring Extracts," awarded to the three persons who made the next highest general average for the entire series of questions.

To J. H. PRATT, Birmingham, Ala.,

MAX A. GOLTZ, Winona, Minn.,

And MISS MAUDE FLORENCE CAIN, Lancaster, Pa.

The Third Prize.

A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry awarded to the person sending in the most satisfactory replies to any three sets of questions, but who did not win either of the other prizes.

To FRANK M. WAYNE, Rochester, N. Y.

The Fourth Prize.

A copy of Lloyd's "Elixirs," awarded to every person who sent in an answer to every one of the questions published in the series, making an average of 66 per cent.

The number who made a general high average but who failed to secure this prize is rather surprising. The failures are due in many instances to neglect in sending in replies until too late to get credit for them in the regular course. This regulation as to the time of receipt of answers, though necessary for facilitating the work of the Editor of the Quiz Box, bore rather hardly on our subscribers in distant sections. Sufficient time was given however, to hear from most of the United States this side of the Rocky Mountains, between the time of the printing of the questions and the rating of the answers.

The winners of these prizes are:

James Banks, Mifflintown, Pa.
H. J. Barber, Alton, Ontario, Canada.
J. C. Boyer, Wicconisco, Pa.
W. E. Bruce, Boston, Mass.
J. W. Brewer, Lake Preston, S. Dak.
J. C. Dague, Fredericktown, Ohio.
T. J. Derrberry, Centreville, Tenn.
William E. Gokay, Bennington, Vt.
Frank Hartmann, Middletown, Conn.
Frank L. Harwood, Warren, Mass.
Seymour Hull, Hoosick Falls, N. Y.
Chas. W. Hyde, Sharon, Pa.
Henry Lampard, Montreal, Canada.
H. G. Lavalley, Gouverneur, N. Y.
C. J. McCloskey, Jersey City, N. J.
F. H. Mayo, Mulhall, Pa.
F. L. Mills, Boston, Mass.
Thomas W. Murphy, East Bradey, Pa.
John R. Murray, Centreville, Tenn.
W. B. Nethery, Toronto Junction, Ont.
Edward L. Page, Lancaster, Pa.
P. H. Peters, Henderson, Mich.
A. V. Rand, Wolfville, N. S.
Aber Y Smith, Clarksburg, W. Va.
Clarence O. Snavelly, Lebanon, Pa.
Moses W. Somers, Boston, Mass.
W. Scallin, Mitchell, S. Dak.
Bertie Ward, Orange, N. J.
H. A. Woodward, Plainfield, N. J.

We have received the most abundant proof that those who send in answers constitute but a small percentage of those by whom the Quiz Box is appreciated, and we are therefore encouraged to make it a permanent feature of this journal.

Answers to First Series Questions.

1. (a) *Sarsaparilla*, *smilax officinalis*.
(b) *Vetiveria*, *andropogon muricatus*.

2. Two following are free from starch and inulin:

(a) *Senega*, *polygala senega*. "The root is about 4 inches long, with knotty crown, having numerous short stem remnants, with scaly leaves, and divided into a few branches $\frac{1}{2}$ to $\frac{3}{4}$ inch thick; branches spreading, tortuous wrinkled, somewhat fissured transversely and keeled when dry, fleshy and round after having been soaked in water; externally, yellowish-grey or brownish-yellow; fracture short; bark whitish within, sweetish, afterward acrid, inclosing an irregular, porous, yellowish, less acrid or nearly tasteless wood; odor slight, but unpleasant. Bark thick; the small celled inner bark present on only one side, taking the place of more or less of the outer bark, and on drying forming the keel; no bast fibers present; wood circular near the crown, below consisting of various shaped segments and rays; medullary rays delicate."

(b) *Saponaria officinalis*.—Root "about 10 inches long, $\frac{1}{2}$ to $\frac{3}{4}$ inch or more in

thickness, nearly cylindrical, longitudinally wrinkled, light rust-brown, internally whitish with a rather thick bark containing numerous small white crystal cells, and a pale yellow medullium, with indistinct medullary rays; inodorous, taste sweetish, somewhat bitter, persistently acrid."

3. The three following are free from starch, but contain inulin:

(a) *Dandelion*, *Taraxacum dens leonis*. Root, "nearly cylindrical, 4 to 12 inches long, above about 1 inch thick, crowned with several short thickish heads, little branched, longitudinally wrinkled, externally gray-brown, internally white, with yellowish center, when dry breaking with a short fracture; inodorous; taste bitter; bark thick, white, consisting of parenchyme, and containing numerous concentric brown circles, formed by lactiferous ducts. Medullium yellowish, porous. Medullary rays wanting."

(b) *Pyrethrum*, *Anacyclus Pyrethrum*. Root "somewhat fusiform, nearly simple, 2 to 4 inches long, about $\frac{1}{2}$ inch thick, annulate above, deeply wrinkled longitudinally below, externally dark gray-brown, internally brownish-white; fracture short; inodorous; taste pungent and very acrid. Bark rather thick, containing two circles of shining axially elongated resin ducts; wood edges slender and yellowish; medullary rays slender."

(c) *Inula*, *Inula Helenium*. "Branches

of the root, 6 to 12 inches long, and $\frac{3}{4}$ to 1 inch thick; in commerce nearly always in transverse concave slices or longitudinal sections, with overlapping bark, externally wrinkled and brown, flexible in damp weather; when dry breaking with a short, horny fracture; internally grayish, slightly radiate and dotted; odor peculiar, aromatic; taste bitterish, camphoraceous, aromatic. Bark thickish, with several irregular circles of resin ducts; wood bundles small, forming many narrow wedges; medullary rays broader, containing numerous resin ducts."

4. The two following contain starch and have laticiferous ducts in bark:

(a) *Asclepias tuberosa*.

"Root large and fusiform, dried in longitudinal or transverse sections, from $\frac{3}{4}$ inch to 6 inches long and about $\frac{3}{4}$ inch or more in thickness, the head knotty and slightly but distinctly annulate, the remainder longitudinally wrinkled; externally orange brown; internally whitish; fracture uneven, tough; inodorous, taste bitterish and somewhat acrid. Bark thin, in two distinct layers; wood yellowish and porous, with broad white medullary rays."

(b) *Euphorbia ipecacuanha*.

"Roots more than 12 inches long, $\frac{3}{4}$ inch thick, nearly cylindrical, with several branches or heads, short and somewhat knotty, light brown, wrinkled, fracture short; bark rather thick, white internally; wood yellowish, spongy, inodorous; sweetish, somewhat bitter, slightly acrid."

5. *Angelica*, *Archangelica officinalis*.

"Root stock 2 inches to 4 inches long, 1 inch to 2 inches thick; annulate; below divided into numerous nearly simple cylindrical and tuberculate branches, which are $\frac{1}{2}$ inch to $\frac{3}{4}$ inch thick and 8 inches to 12 inches long; grey-brown; fracture short; aromatic, sweetish, pungent and bitter. Root stock with a rather thick bark, irregularly curved yellowish porous wood-wedges and a whitish pith; root branches with the spongy whitish bark rather thicker than the yellowish soft wood, bark with radiating lines of large resin ducts in the bast rays, which are destitute of bast fibers."

6. *Jalapa*, *Ipomoea Purga*. "Jalap tubers are produced from the nodes of the thin rhizomes by the enlargement of the bases of the rootlets, and are either napiform, 2 to 4 inches thick, or pyriform or oblong, and thinner, but varying in size, the larger ones incised, more or less wrinkled, dark brown, with lighter colored warts and short transverse ridges, hard, compact, internally pale grayish-brown, scarcely radiate, but showing numerous concentric circles; fracture resinous, not fibrous; odor slightly smoky and sweetish; taste sweetish and acrid. Predominating tissue is parenchyme containing starch and calcium oxalate. Bark thin, in the inner layer with a dense zone of resin cells. Vascular bundles small, distant and indistinct; the concentric circles formed of resin cells, arranged in wavy, narrow or somewhat broader zones."

7. *Glycyrrhiza glabra*. "Long cylindrical pieces from $\frac{1}{2}$ to 1 inch in thickness, longitudinally wrinkled, externally greyish-brown, warty; internally tawny-yellow; pliable, tough; fracture coarsely fibrous; nearly inodorous; taste sweet, somewhat acrid. Bark rather thick, with a thin cork and narrow bast wedges; wood-wedges narrow, appearing porous from small groups of large ducts, and accompanied by crystal cells. Medullary rays distinct, consisting of several rows of cells, and containing starch."



Miss Maude Florence Cain.

One of the winners of the second grade prizes.

Miss Maud Florence Cain, who is the winner of one of the three second grade prizes in the Quiz Box competition, looks upon herself as a Yankee, as she is a native of Massachusetts, and has spent the major portion of her life in the city of Springfield.

Miss Cain's first pharmaceutical preceptor was Dr. P. A. Sprague of Springfield, with whom she remained for a year. In October, 1891, she matriculated at the Philadelphia College of Pharmacy, and on completing her junior course returned to Springfield, where she entered the employ of Wm. P. Draper for the summer, resuming her studies in Philadelphia in the Fall.

In the Spring of 1893 Miss Cain removed with her father and his family to Lancaster, Pa., where she secured a position with Chas. A. Heinich as the venerable and highly respected ex-president of the American Pharmaceutical Association. It is Miss Cain's intention to resume her studies at Philadelphia in the Fall with a view to graduation.

She likes all kinds of pharmaceutical work, and hopes eventually to go into business on her own account somewhere in the West.

The high grade won by Miss Cain in the Quiz Box competition is excellent evidence of her knowledge of the theoretical portion of her chosen calling.

8. *Cephaelis Ipecacuanha*. Root "about 4 inches long and $\frac{1}{2}$ thick; mostly simple, contorted, dull grey-brown, or blackish, finely wrinkled, closely irregularly annulated, and often transversely fissured; internally scarcely radiate; bark brittle, brownish, somewhat waxy, easily separated from the thin, whitish, tough, ligneous portion which amounts to about 15 per cent. of the root; odor slight, nauseous; taste bitterish, acrid, nauseating. Cork thin. Bark not uniform in thickness, not radiating, consists of parenchyme inclosing starch or calium oxalate; medullium slightly radiating, consists mainly of pitted wood cells containing starch.

9. *Gelsemium sempervirens*. "The creeping rhizome and rootlets are collected. Cylindrical, long or cut in sections, occasionally $1\frac{1}{4}$ inches thick, the roots often thinner; externally light brown yellow with purplish-brown longitudinal lines; tough, fracture splintery; internally yellowish; odor aromatic, heavy; taste bitter, of the wood slightly so. Bark thin with a thin cork and silky bast fibers, adheres closely to the wood. The latter is yellowish, composed of porous wood-wedges, and has rather broad medullary rays. The rhizome has a thin pith."

10. *Statice limonium*. "Several headed, 12 to 24 inches long, 1 inch or more thick, armulate above, branched and wrinkled below, compact, tough, externally purplish-brown, internally lighter with a rather thick bark and narrow, yellowish wood wedges; inodorous, strongly astringent and slightly bitter."

Names of Students rated at 75 on First Series.

E. Q. Anwalt, Philadelphia, Pa.
James Banks, Mifflintown, Pa., H. J. Barber, Alton, Ont.; John W. Brewer, Lake Preston, S. Dak.

Frank Hartmann, Middletown, Conn.
Chas. J. McCloskey, Jersey City, N. J.
F. L. Mills, Boston, Mass.
J. H. Pratt, Birmingham, Ala.
C. P. C. Timberman, Alexandria, Va.

Questions; Fourth Series.

SPECIFIC GRAVITY.

81. Upon what laws of matter is the study of specific gravity based?

82. Name four methods by which specific gravity may be determined, describing briefly the procedure according to each and describing the apparatus required.

83. A piece of lead weighs 228 grains in air and 208 grains in water; give the specific gravity.

84. A crucible weighs 749 grains in air and 714 grains in water. What is the specific gravity of the metal from which it is made and what is that metal?

85. A solid soluble in water weighs 680 grains in air and weighs 540 grains in ether. What is its specific gravity?

86. A solid weighs 795 grains in benzene (specific gravity 0.885) and weighs 845 grains in the air. What is its specific gravity?

87. A piece of cork weighs 154 grains; attached to a sinker weighing 921 grains in water the whole weighs 425 grains in water. What is the specific gravity of the cork?

88. A piece of wax weighs 2334 grains in air, a sinker is counterpoised in water and the wax attached. It now requires an addition of 75 grains weight to overcome the buoyancy of the whole. What is the specific gravity of the wax?

89. A bottle holds 500 grains of water;

when filled with another liquid it weighs 6750 grains. What is the liquid and what is its specific gravity?

40. A two liter flask holds 30864 grains of a liquid. What is the liquid and what is the specific gravity?

Student's Column.

Organic Materia Medica of the U. S. P.

[Continued from page 108.]

Coriandrum. Coriandrum seeds.

BOTANICAL NAME... *Coriandrum sativum*.
NATURAL ORDER... Umbelliferae.
HABITAT... China, Southern Europe.
CONSTITUENTS... Volatile oil; fatty matter, malic and traces of tannic acids.
PROPERTIES... Aromatic stimulant.
PARTS USED... The fruit.

Dose—Ingredient in Conf. Sennae.

Crocus. Saffron, Zafran, Spanish saffron, Autumnal crocus.

BOTANICAL NAME... *Crocus sativus*.
NATURAL ORDER... Iridaceae.
HABITAT... Oriental countries, probably Greece and Asia Minor eastward to Persia; cult. in Spain, France, and Italy.
CONSTITUENTS... Volatile oil; color-matter.
PROPERTIES... Stimulant aromatic; chiefly used as a coloring agent.
PARTS USED... The stigmas.

Dose—Tinct.—Cc. 4—8.

Cubeba. Cubeb; Java pepper, Tailed pepper.

BOTANICAL NAME... *Piper cubeba*.
NATURAL ORDER... Piperaceae.
HABITAT... Java.
CONSTITUENTS... Volatile oil; resin and cubebic acid.
PROPERTIES... Local irritant; mucous sedative.
PARTS USED... The unripe fruit.

Dose—Ext. fld. Cc. 0.60—2.00; Oleore. in. Cc. 0.30—1.00; Tinct. Cc. 2—8.

Cusso. Koussou; brayera.

BOTANICAL NAME... *Hagenia abyssinica*.
NATURAL ORDER... Rosaceae.
HABITAT... Northeastern Abyssinia.
CONSTITUENTS... Acrid resin, tannin.
PROPERTIES... Emmenagogue.
PARTS USED... The female inflorescence.

Dose—Ext. fld. Cc. 8—12.

Cypripedium. Cypripedium; ladies slipper; American Valerian, nerve root, yellow moccasin flower.

BOTANICAL NAME... *Cypripedium pubescens*, and *Cyp. parviflorum*.
NATURAL ORDER... Orchidaceae.
HABITAT... North America.
CONSTITUENTS... Volatile oil; resin and starch.
PROPERTIES... Nerve vine, antispasmodic.
PARTS USED... The rhizome and roots.

Dose—Ext. fld. Cc. 0.60—1.30.

Digitalis. Digitalis; foxglove.

BOTANICAL NAME... *Digitalis purpurea*.
NATURAL ORDER... Scrophulariaceae.
HABITAT... Southern and Central Europe.
CONSTITUENTS... Digitalin (glucos.); digitoxin; digitonin; chlorophyll; various salts.
PROPERTIES... Diuretic and sedative to the heart's action.
PARTS USED... The leaves collected from plants of the second year's growth.

Dose—Ext. Gm. 0.01—0.02. Ext. fld. Cc. 0.06—0.14. Inf. Cc. 16; Tinct. Cc. 0.6—1.20.

Dulcamara. Dulcamara; bittersweet; woody night shade.

BOTANICAL NAME... *Solanum Dulcamara*.
NATURAL ORDER... Solanaceae.
HABITAT... Europe, Northern Africa, China.
CONSTITUENTS... Alkaloidal principle, dulcamarine.
PROPERTIES... Anaphrodisiac, diaphoretic and alterative.
PARTS USED... The young branches.

Dose—Ext. fld. Cc. 4.

Elastica. India-rubber; caoutchouc; Para rubber.

BOTANICAL NAME... *Hevea, Guyanensis* and other species.
NATURAL ORDER... Euphorbiaceae.
HABITAT... South America, Malayan Archipelago and Southeastern Africa.
COMPOSITION... Is a hydrocarbon ($C_{50}H_{100}$); yields caoutchouc C_7H_8 on destructive distillation.
PROPERTIES... Used as an addition to plasters; protective.
PARTS USED... The prepared milk juice.

Ergota. Ergot; ergot of rye; spurred rye.

BOTANICAL NAME... *Claviceps purpurea*.
NATURAL ORDER... Gramineae—Class Fungi.
HABITAT... North America, but imported from Germany, France and Spain.
CONSTITUENTS... Ergotine, ecboline, ergotamine, cornutine, all alkaloids; seleromucin, sclerotic acid, cholesterol, mycose, mannite, leucine, methyl and tri-methyl amine; several coloring matters; fixed oil.
PROPERTIES... Emmenagogue, uterine excitant; parturient.

Dose—Ext. fld. Cc. 2—4. Vin. Cc. 4—12.

Eriodictyon. Eriodictyon; Mountain balm; Yerba santa; Consumptive weed; Bears, weed.

BOTANICAL NAME... *Eriodictyon glutinosum*.
NATURAL ORDER... Hydrophyllaceae.
HABITAT... Mountains of central California, South to northern Mexico.
CONSTITUENTS... Volatile oil and resin eriodictyon, eriodictyonic acid.
PROPERTIES... Used in form of syrups to mark bitterness of quinine; said to be useful as a bronchial sedative, but real value not determined.
PARTS USED... The leaves.

Dose—Ext. fld.—Cc. 2—4.

Eucalyptus. Eucalyptus; blue gum leaf.

BOTANICAL NAME... *Eucalyptus globules*, Myrtaceae.
NATURAL ORDER... Myrtaceae.
HABITAT... Tasmania, Australia. Introduced into Southern Europe, Southern United States and California.
CONSTITUENTS... Volatile oil (6 per cent.) tannin, crystall. fatty acid, resins.
PROPERTIES... Febrifuge in intermittent fever, anti-malarial.
PARTS USED... The leaves collected from the older parts of the tree.

Dose—Ext. fld. Cc. 0.60—1.30.

Euonymus. Euonymus; Wahoo; Spindle tree; burning bush.

BOTANICAL NAME... *Euonymus atropurpureus*.
NATURAL ORDER... Celastraceae.
HABITAT... United States.
CONSTITUENTS... A glucoside Euonymin, several resins.
PROPERTIES... Purgative, acting chiefly on the liver.
PARTS USED... The bark of the root.

Dose—Ext. Gm. 0.30.

Eupatorium. Eupatorium; thoroughwort; bore-set; Indian sage.

BOTANICAL NAME... *Eupatorium perfoliatum*.
NATURAL ORDER... Compositae.
HABITAT... Canada and United States.
CONSTITUENTS... Volatile oil, tannin, alkaloid Eupatorine; Eupatorin, glucoside.
PROPERTIES... Stimulant tonic; diaphoretic and laxative.
PARTS USED... The canes and flowering tops.

Dose—Ext. fld. Cc. 4.

(To be continued.)

ANTISEPTIC FLUID.

(Hospital St. Louis de Paris).

	Part.
Borax.....	11
Boracic acid.....	5
Salicylic acid.....	5
Thymol water.....	1000

ANTISEPTIC POWDER.

(Hospital St. Louis de Paris).

	Parts.
Iodoform.....	100
Benzoin.....	100
Cinchona powdered.....	100
Magnesium carbonate.....	100
Eucalyptus oil.....	12



Written for the
American Druggist and Pharmaceutical Record.

INSIDE THE STORE.

THE BUSINESS-BRINGING COUNTER AND
THE TRADE-ATTRACTING WINDOW.

By NATHANIEL C. FOWLER, JR.

Every store has windows.

Every store has counters.

Every store has shelves.

The windows, counters, and shelves are receptacles for goods, and more.

They are places of display which cost the retailer nothing, for he must have them anyway.

The window, the counter, and the shelf offer the greatest opportunities for profitable advertising, seldom over-estimated, and almost always under-estimated by the store-keeper.

A well arranged shop window is a positive guarantee that the goods contained therein will be seen and appreciated by the passerby.

The window is on the street where everybody will see it, whether he wants to or not, and if it is dressed as it should be, the pedestrian will not only see it, but he will examine the contents of it.

There are two methods of window dressing, both good, but one should never be used exclusively, for in the alternate use of both is the greatest profit.

THE DISPLAY ARTISTIC.

The first method is that of the artistic and harmonious, the blending together of colors and shades, the goods simply taking the place of decorative paraphernalia.

Such a window, if properly lighted, is very impressive, and is conducive to sales.

The second method consists of the display of goods, not really inartistically arranged, and yet with more or less of a sacrifice of harmony and art—the presentation of the goods themselves more than the arrangement of them.

No artist would be particularly impressed, from an artistic standpoint, with a large packing box in a window, with the name of the firm written thereupon in the shipping clerk's style of lettering, with a single shoe, a hammer, or bottle, or a piece of a tire, or an electric bell, or any other one thing on the top of the box, conspicuous for its isolation, and yet such a window display would, from its novelty, attract the attention of every passer-by, and that one article, common as it may be, will be studied and re-studied, because it stands by itself in the identity of its oneness.

A window display should never be a conglomeration of articles, unless such articles are used in the production of an artistic effect.

It is better to have two practical window displays and one artistic than to have two artistic and one practical.

The object of the window is to sell

goods, and art and everything else should be used to that end.

It is generally advisable to present one class of articles at a time, either by showing a single article or a great many of them.

While it is some times better to show similar articles of different prices, it is more frequently advisable to present articles all of the same price in the same window.

The article retailing for \$1 certainly will not make as good an appearance in a window if displayed with a similar article retailing for \$2.

The \$1 article will look well enough by itself, but by contrast with a superior article of the same class its rough lines are all the more prominent.

Common calico should not be shown with silk, because silk looks so much better than calico that the calico is likely to look cheaper than it really is.

A 25 cent brush is generally a pretty good brush, but alongside of a \$3 brush it looks as if worth less than it is.

THE DISPLAY PRACTICAL.

Working exhibits are always profitable.

There isn't anything very original or very brilliant in placing a wagon in a window and arranging it so that the wheels are kept in motion, and yet the movement of the wheels will make everyone stop, and if they stop to see the wheels go around they can not help admiring the finish and construction of the vehicle.

Everybody knows how shoes are pegged and mended, and yet it is sometimes necessary for a policeman to disperse the crowd when a conventional shoemaker is in the old way mending shoes in a window.

The same shoemaker inside the store would not attract anybody's attention, but in the window everybody stops to look at him.

Candy pulling in a window is an old idea, and yet it never fails to attract a crowd.

Griddle cake cooking is familiar to everybody, and yet griddle cake eaters will pass by the griddle cake irons in the store and stop to look in the window to see the white-capped cook turn the flap-jacks.

A lot of bricks dumped in a window, with a danger-signal sort of a card standing in their midst announcing that these are the bricks used by the Great Atlantic and Pacific Building Company for the construction of their houses, will attract everybody, and assist in making people enter the office.

THE UNIQUE WINS

Something out of the usual course of things, something which is either very artistic or not artistic at all, which illustrates one fundamental idea, will, if placed in the window, bring more trade into the

store than any elaborate display of dress goods or any other goods arranged as the majority of people arrange them.

The same general ideas that apply to window dressing, to a greater or less extent can be used in the arrangement of goods in the interior of the store.

Of course goods of a character should be in the same department, but they need not be jumbled together.

If the carriage maker has several carriages of similar styles there is no reason why he should put the carriages very nearly alike side by side.

Let him separate them so that each carriage will have an identity.

That which applies to carriages applies to everything else.

The show-case, which is a sort of compromise between shelf and counter, should be arranged as nearly as possible on the window plan, and should be well lighted, artificially or otherwise.

A dark shelf is bad enough, but a dark showcase is an abomination.

In every store some one clerk who understands effective display should be made head dresser and decorator, and his services should be appreciated.

He should be made to understand that what you want is something that will sell goods, not something that will only delight the eye.

It is better to have too much business



It Was Like This.

I had been ill, very ill, with pains in the back and all over the body, and everything I tried in order to get relief only made me worse. One day a friend called and said: You should try a box of

BLANK'S LIVER-PILLS.

Well, I did, and in forty-eight hours I was a new man. Did you say you knew someone who suffers like I did? Just tell them of these pills. They are a marvel.

SOLD ONLY BY

BLANK, CHEMIST,
HIGH STREET,
DULTOWN.

AN ENGLISH IDEA.

than too much art in it; but art and business in the right proportion bring the most business.

All these things cost little, and it is simply a question of whether the business man will use them for all they are worth, or sacrifice so much good advertising and selling space.

In the use of everything, each part playing its part, is the success of business.



NEW YORK.

DRUG TRADE CLUB MEETING.

A meeting of the Drug Trade Club of New York, an organization of the wholesale and importing druggists of New York city, which has been before referred to in these columns, was held at 52 Cedar street on Friday August 10th.

The club elected the following officers for the first year: President, George R. Huller, of R. Hiller, Son & Co.; vice-president, James Shaw, of Thurston & Braidich; secretary, R. W. Phair, of R. W. Phair & Co.; treasurer, C. G. Euler, of Dodge & Olcott. Board of governors—James Hartford, of Schoelkopf, Hartford & MacLagan; Earnest Stoffregen, of Sharp & Dohme; J. L. Hopkins, of J. L. Hopkins & Co.; C. G. Bacon, of C. G. Bacon & Co.; Benjamin Blossom, of Dodge & Olcott; Edward Young of Thurston & Braidich; H. T. Jarrett, of the Mallinkrodt Chemical Works; W. W. Dixon, of E. R. Squibb & Son, and George Was-

son. The club decided to take the quarters at 52 Cedar street formerly occupied by the Insurance Club. The board of governors was selected with a view to having upon it representatives of as many different lines of the trade as possible, with the idea of making the club broadly representative. Following is a list of the members:

Geo. W. Hopping, of Seabury & Johnson; David E. Green, Jr., of David E. Green; C. G. Euler, of Dodge & Olcott; J. A. Blanchard; S. Money Penny, of Samuel G. McCotter & Co.; F. R. McDermott, of the Nichols Chemical Company; George A. Wasson, H. Peters; F. W. Koch, of Lehn & Pink; W. G. Timken, of McKesson & Robbins; E. A. Sayre, of Seabury & Johnson; J. L. Hopkins, of J. L. Hopkins & Co.; P. S. Tilden, of the Kalbfleisch Chemical Co.; Ed. Young, of Thurston & Braidich; H. T. Jarrett, of the Mallinkrodt Chemical Works; W. G. Ungerer, of Colgate & Co.; John Queeny, of Merck & Co.; Chas. Weiss, of McKesson & Robbins; R. E. Stoeckel; W. W. Dixon, of E. R. Squibb & Sons; C. A. Mayo, Editor of the AMERICAN DRUGGIST; E. J. Wright; E. T. Sawtelle, of the Arlington Chemical Co.; C. B. Franc and R. W. Phair, of R. W. Phair & Co.; H. Barker, of H. J. Baker & Bro.; Jos. A. Brohel, John Oehler, of McKesson & Robbins; Walter F. Hamilton, of Billings & Clapp; Jos. A. Velsor, of Peck & Velsor; A. U. Andrus of A. U. Andrus & Co.; C. L. Williston, of Chas. Pfizer & Co.; S. H. Comstock; Macey F. Deming, of Kirby & Burckett; J. G. Allen, of Henry Allen; John Anderson, of Chas. Pfizer & Co.; Chas. H. Burckett, of Kirby & Burckett; A. D. Fulton, of D. O. Haynes Publishing Co.; A. P. Hamilton, and James C. Green, of David E. Green; Emil Bichels of Bichels & Tchow; Thos. Cook, of The N. Y. Quinine & Chemical Co.; Jos. Heinemann; D. H. Newhall; Townsend Rushmore, of Smith & Schipper; Geo. E. Sterry, Jr.; John D. Titworth, of J. D. Titworth & Co.; C. C. Spieden, Jr., of A. Klipstein; Benj. Blossom, of Dodge & Olcott; John B. Joy; W. Hamann, of The Roessler & Hasslacher Co.; Isaac Hillier and Geo. R. Hillier, of R. Hillier's Son Co.; Theo. Wicker and Geo. Merck, of Merck & Co.; C. W. Beach, of L. C. King & Co.; George Massey and R. B. Bucklin, of Lanman & Kemp; Chas. A. Holmes, of W. S. Merrell Chemical Co.; Lewis A. Ransom; James Shaw and M. Braidich, of Thurston & Braidich; Arthur A. Stillwell; Edward Wells, of C. N. Crittenton Co.; Chas. Parmele, of E. M. Johnson & Co.; E. M. Johnson, of Johnson & John-

son; Geo. V. Sheffield, of Innis & Co.; Geo. C. McKesson, of McKesson & Robbins; H. D. Robbins, of McKesson & Robbins; M. Babcock, of Oakley Soap & Perfume Co.; A. McGeorge, of the Cheesebrough Mfg. Co.; W. B. Ungerer; Chas. Squibb, of E. R. Squibb & Sons; W. S. Gray; Clarence W. Brooks, and M. Todd, of L. C. King & Co.; Harry Polhemus; James Hartford, of Schoelkopf, Hartford & MacLagan; Frank Black, of Chas. Pfizer & Co.; A. Kennedy, of C. N. Crittenton Co.; M. Faria, of H. J. Baker & Bro.; E. Henning; Chas. E. Lovett and C. Graham Bacon, of C. G. Bacon & Co.; A. D. Blanchett; T. P. R. Loud, of Merck & Co.; J. H. Stallman, of Stallman & Fulton; Rudolph Wirth, of E. Fougere & Co.; Otway Latham, of Tilden & Co.; E. H. Hammer, of Keasby & Mattison; Robt. Cabell, of Armour & Co.; D. Kelsey Wieker, of Chas. E. Hires Co.; F. M. Smith, of H. J. Baker & Bro.; Benj. Lillard; Ernest Stoffregen, of Sharp & Dohme; Geo. W. Finch and C. E. Tyler, of Tyler & Finch; Elihu M. Weed, of W. H. Scheffelin & Co.; W. S. Merseu, of Scheffelin & Co.; D. E. Green, Sr., of D. E. Green & Co.; Harry Walker, of Croton Chemical Co.; Arthur K. Gardiner; Clement E. Gardiner; Benj. I. Mott, of Ladd & Coffin; Max Tchow, of Bichels & Tchow; C. C. Henman, of The Knapp Extract Co.

NEWS MENTION.

J. R. Lawrence, of St. Louis, Mo., visited this city recently.

Two Montclair druggists have been fined recently for illegal sales of liquor.

W. R. Cobb has opened a pharmacy at 251 Graham avenue, Paterson, N. J. A Low Art Tile Fountain is one of the fixtures.

A Mr. Miller of Albany will open a drug store in the new building of William Pebler at Ravenna, as soon as it is completed.

M. C. McGrath, formerly with Tarrant & Co., is now with Henry Allen as traveling salesman.

E. J. Martin, for a number of years with John H. Sheehan & Co., is now in charge of the new East Utica drug store in the Coupe Block, Utica.

A new pharmacy has been opened by Harry M. Kilborn at 801 Fifth avenue, Brooklyn. One of the handsome features of the store is a new pattern Low Art Tile Fountain.

Theodore Maris sailed for Europe August 15th, on the steamer Paris. He will join his mother and sisters abroad and spend a six weeks' vacation, seeing the sights of Europe.

Joseph Hanson, senior member of the firm of Hanson, Van Winkle & Co., manufacturers of acids and dyestuffs and importers of chemicals, Newark, died recently. He was sixty-four years old, a bachelor.

The soda fountain in B. F. Warren's new store at Amsterdam avenue and Seventy-ninth street, is a particularly fine example of the Low Art Tile Fountain purchased from the New York agents of the company.

Alex P. Mende & Co., of New York city, is a new incorporated company, to manufacture and deal in dyestuffs and chemicals; capital, \$10,000, and directors, Alex

P. Mende and R. A. Welcke, of New York city, and Luther Shafer, of Rutherford, N. J.

Chas. Roome Parmele of the E. M. Johnson Co., manufacturing chemists, and proprietors of the "Arsenauro," "Calcauro," "Mercauro," preparations has returned to his desk from a short but pleasant vacation spent amid the many attractions of Lake George.

The Saratoga Kissingen Spring has been leased for a term of years by Messrs. Hanson, McClellan & Snow, of Schenectady, manufacturers of proprietary goods. The spring was recently purchased at foreclosure sale by F. W. Ayer, of Philadelphia.

A gallon bottle bearing the label "Eau Sedative—H. N. Fraser & Co., Apothecaries, 262 Fifth avenue, New York," which stands on a tall bureau in the cottage on Mt. McGregor where Gen. Grant was taken to spend the last days of his fatal illness, constitutes an advertisement of the firm calculated to make the average advertising expert feel positively envious.

Dr. Reuben D. Clark, State Chemist, died of cholera morbus at his summer home, near Albany, last Saturday. He was born near Chatham about forty-seven years ago. Upon the organization of the State Dairy Commission he was appointed as chemist, and when the Commission was changed to the Agricultural Department he still retained the position. A widow and two children survive him.

The Paragon Mfg. Co. is a new company, formed for the manufacture and sale of druggists' rubber sundries and specialties, with E. C. Auer as manager. Mr. Auer is well known to the trade from his ten years' connection with Whitall, Tatum & Co. in the buying department. The offices and salesroom of the Paragon Mfg. Co. are at No. 26 Barclay street. A full line of sundries and specialties will be carried.

The Champion National Carbonic Acid Gas Company has been incorporated at Albany, to gather and sell mineral waters and carbonic acid gas from the property known as "The Champion Spring," at Saratoga; capital, \$50,000, divided into 1,000 shares, and directors, Julius S. Formel, who subscribes for 600 shares; Charles F. Phillips and Thomas Moore, of New York city; Charles H. Graham and William C. Boone, of Brooklyn.

Prof. Luther F. Stevens, of Brooklyn, has been spending a few days at Patchogue, a pleasant Long Island summer resort facing on the Great South Bay. Mr. Stevens' health has of late been a cause of some anxiety to his friends, and it is feared his condition will not permit of his attendance at the Asheville meeting of the A. P. A. His paper on "The National Formulary" will in all likelihood be presented by the Chairman of the Committee on Papers.

No great man can escape the patent medicine fiend in search of an eminent individual to endorse his curative. The most ambitious, persistent and successful of these gentlemen has obtained the written indorsement of conservative Cornelius Vanderbilt in behalf of his medicine, which may be seen in a Herald square drug store. It has been enlarged and given free circulation. A look at it shows you that Mr. Vanderbilt writes a full, free, plain hand that cannot, after all, be very well imitated.

Druggist Rudolph C. Knipe, who has a large store at No. 629 Grand street, Brooklyn, and Dr. Simon Majewski are at war

with each other over the manufacture of a concoction known as German Herb Tea. The quarrel between the two has been continued with much bitterness, and as alleged by Majewski resulted in Dr. Knipe having a circular printed both in German and English and spread about broadcast. Dr. Majewski applied at the Ewen street police court and obtained a warrant for the arrest of Dr. Knipe, charging him with criminal libel.

Hazard, Hazard & Co., the well-known druggists, of 1,150 Broadway, this city, have begun a suit in the Supreme Court for \$50,000 damages against John R. Caswell, of Caswell, Massey & Co., druggists, 1,121 Broadway and 578 Fifth avenue, for illegally attaching the property of Hazard, Hazard & Co. at Newport. John R. Caswell obtained a judgment against R. N. Hazard on a claim which has been in dispute for fifteen years. He attached the Newport store of the firm. R. N. Hazard alleges that as the firm was incorporated in 1889 the defendant had no right to attach the property of the corporation on a judgment against an individual.

Richard McDonald, Mayor of New Brunswick during the Civil War and one of the oldest residents of that city, died at his home there recently. His death was directly due to an attack of acute dysentery. He was born in Somerville on December 20, 1803, and was in his ninety-second year. He came of Scottish ancestry, but the family is one of the oldest in New Jersey, having settled in the state in 1685. His grandfather, Major Richard McDonald, fought in the Revolution. Mr. McDonald went to New Brunswick in 1823, and soon established a wholesale and retail drug business. He was elected Mayor in 1863, and served for two years. From 1868 to 1882 he was Collector of Taxes for Middlesex County.

Prof. C. F. Heebner, Dean of the Pharmacy Department of the University of Toronto, paid a flying visit to New York last week, where he was warmly greeted by many of his former pupils and associates. Since he has taken up his residence in Canada, Professor Heebner has won fame and distinction in other arts besides that of pharmacy. Canadians have come to recognize him as a champion wheelman, as he has won many prizes in tournaments for fast and long distance riding. He is hard at work upon the revision of his *Manual of Pharmacy*, bringing it into accordance with the new Pharmacopoeia and adding the new preparations contained in the British Addendum. Heebner's "Manual of Pharmacy" is a very popular work and the new revision will doubtless command a wide circulation.

The sudden death, by heat prostration, of Henry Maclagan in Brooklyn Friday evening, August 3, was a severe shock to the members of his family as well as to his many friends. Mr. Maclagan was on his way to his home at 89 Second Place, shortly after 7 o'clock Friday evening. He became so weak that he stopped at Crawford's drug store in Court street, opposite Carroll Park. He fainted there, and an ambulance was sent for. He was recognized by a neighbor, and taken to his home in the ambulance. Despite all efforts to revive him, he died within half an hour of the time he reached his house. Mr. Maclagan was in his forty-fifth year, and was for years the chief chemist of McKesson & Robbins of this city. He had been ailing for several weeks with gastric troubles, but the firm did not anticipate any serious result from his

illness. Mr. Maclagan was born in Brooklyn, but spent his early boyhood in Canada. He returned to this country about twenty years ago, and had lived in Brooklyn ever since. He was unmarried.

City Clerk Benjamin, of Brooklyn, sent a notice a few days ago to J. Fred Windolph, druggist, State street and Flatbush avenue, reminding him that he kept an unlicensed dog, and that if a license were not obtained within five days from the notification, proceedings would be taken against him for violation of a city ordinance. Following is Mr. Windolph's reply: "I learn from your postal, just received, that the Department of Police has reported that I harbor or possess a dog. That is a mistake, if thereby is meant a quadruped of the genus *Canis familiaris*. I did once possess a fine dog, but 'fired' it long before hot weather set in. It may surprise you that the Police Department can report a thing that does not exist. I'll give you a pointer. Perhaps an Argus-eyed policeman caught a glimpse of the dog's ears of my pharmacopoeia by the uncertain light of the near electric street lamps on the corner, or else (on a calm, still night as he passed the store) the dog-wood bark. However, I need these things in my business and hope they will not be disturbed. To be threatened with proceedings for violation of a city ordinance in the middle of dog days is a *Sirius* matter, and in view of the circumstances I ask that you hold in your 'dogs of war.' Yours to a certain extent."

Among those in attendance at the annual meeting of the American Microscopical Society held in Brooklyn, August 15-16, in conjunction with the meetings of the American Chemical Society and Association for the Advancement of Science, was Dr. Frank L. James of St. Louis. In the pharmaceutical world Dr. James is widely known as the editor of the *National Druggist*, one of the most carefully edited and estimable of American drug journals. Next to pharmacy, microscopy is, perhaps, his most highly cherished study, and he is the author of a very popular manual bearing upon the subject. The first edition of his book is now out of print, but a new edition is in course of preparation and will shortly be issued. Few men in the pharmaceutical profession have seen so much of the world and profited so much by opportunities for study as Dr. James. When quite a youth he accompanied his parents on a visit to France and Italy, and lived for some time in Naples. It was during his stay in this ancient city of Italy that he acquired that intimate knowledge of Naples and the Neapolitans which found expression in later years in a descriptive article contributed to an American journal. This article has been widely copied and has formed the basis for more than one illustrated article for the monthly magazines. His thorough familiarity with the languages of continental Europe, strengthened afterward by training in German universities, may be traced to these early associations.

POLITICS BAD FOR DRUGGISTS.

F. A. Bachmann, a Port Chester druggist, who has been missing since last Thursday, has not yet returned, but he has been heard from. It seems that his brother Carl, who is a druggist at Easton, Penn., had loaned him money. J. H. McQuilkin, a friend of his in Port Chester, had likewise loaned him money. F. A. Bachmann told his brother Carl that he was going away and gave him a first lien

on his business to compensate him for the money loaned. He also sent a similar notice to his friend, McQuilkin. Carl got his notice first and hurried to the house of Sheriff Duffy, where he filed his papers. Mrs. Bachmann had somehow got wind of this and asked McQuilkin to represent her interests. He did so and filed his lien in the Sheriff's office at White Plains. When comparison was made, it was demonstrated that Carl Bachmann had got his papers in first, to the exclusion of McQuilkin and Mrs. Bachmann.

At noon, August 7, Deputy Sheriff Marshall took possession of Bachmann's drug store, which is one of the finest in Port Chester. McQuilkin says he has the precedence over Carl and will fight the case. McQuilkin has received a letter from the missing Bachmann. It contains no postmark. In the letter Bachmann asks McQuilkin to answer through the personal column of a New York newspaper. He also says:

"Domestic troubles and my entrance in politics have been my downfall. Further reference to the particulars is unnecessary. Had I kept out of politics, I would have been better off. My accounts with the town are all right."

Scientific Meetings in Brooklyn.

The American Association for the Advancement of Science adjourned on Wednesday, August 22, after a seven days session. The next meeting will be held in San Francisco. The following officers were elected for the ensuing year:

President, E. W. Morley, Cleveland, O.; vice-presidents, mathematics and astronomy, E. S. Holden, Lick Observatory, Mount Hamilton, Cal.; physics, W. Leo Stevens, Troy, N. Y.; chemistry, William McMurtrie, Brooklyn; mechanical science and engineering, William Kent, Passaic, N. J.; geology and geography, J. Hotchkiss, Staunton, Va.; zoology, D. S. Jordan, Palo Alto, Cal.; botany, J. C. Arthur, Lafayette, Ind.; anthropology, F. H. Cushing, Washington, D. C.; economic science and statistics, B. E. Fernow, Washington, D. C.; permanent secretary, F. W. Putnam, Cambridge, Mass.; general secretary, James Lewis Howe, Louisville Ky.; secretary of the council, Chas. R. Barnes, Morison, Wis.; secretaries of the sections—mathematics and astronomy, E. H. Moore, Chicago, Ill.; physics, E. Merritt, Ithaca, N. Y.; chemistry, William P. Mason, Troy, N. Y.; mechanical science and engineering, H. S. Jacoby, Ithaca, N. Y.; geology and geography, J. Perrin Smith, Palo Alto, Cal.; zoology, S. A. Forbes, Champaign, Ill.; botany, B. T. Galloway, Washington, D. C.; anthropology, William Aniter Newcombe McGee, Washington, D. C.; economic science and statistics, E. A. Rose, Palo Alto, Cal.; treasurer, R. S. Woodward, New York.

The American Microscopical Society elected the following officers: President, Simon H. Gage, Cornell University; vice-presidents, Dr. Veranus Moore, Washington, D. C., Prof. Henry G. Hank, San Francisco; secretary, Dr. W. H. Seaman, Washington, D. C.; treasurer, Magnus Pflaun, Pittsburgh, Pa.

The annual meeting of the American Chemical Society was held concurrently with the meetings of the A. A. A. S. The following is a list of the papers read: Contributions to the Chemistry of Cerium, by L. M. Dennis and W. H. Magee; Note on Hardening of Mortar, Note on Test for Strychnine, and The Quality of Water Supplies, by William P. Mason; The

Bacteriology of the Soil as Affected by Depth, Character and Use, by Lucius Pitkin; Utilization of Acid Sulphates, Particularly the So-called Nitre Cake of the Trade, by John Enquist; Oil Gas, by W. A. Noyes; Determination of Benzene in Illuminating Gas, by W. A. Noyes; Recent Progress in the Detection of Adulteration in Lard, by H. W. Wiley; Uchuba Fat, by Joseph F. Geisler; Oxidation of Non drying Oils by Air, by Walter D. Field; A New and Rapid Method of Estimating the Total Proteids in Milk, by E. H. Bartley; Inspection of Cotton for Use in Gun Cotton Manufacture, by Chas. E. Munroe; Ferric Acid and the Ferrates, by C. A. O. Rosell; Some Points in making Molybdate of Ammonia Solutions for Phosphorous Determinations, by Charles B. Dudley; Report on Abbreviations of the Names of Metric Terms used by Chemists, by William H. Seaman.

MASSACHUSETTS.

BOSTON, Aug. 20.—A sad event occurred on the 11th inst., and by it this State loses in the death of Joseph Burnett from a runaway accident, one of the prominent figures identified with the drug trade for many years. Mr. Burnett, though not actively connected with the drug trade of recent years, enjoyed the acquaintance and respect of many druggists of this city. This was especially true with the older members of the Boston Druggists' Association, though advancing years had of late reduced the attendance of the deceased at the meetings of this organization, so that he was rarely present excepting upon the annual gatherings. Mr. Burnett was born in Southboro, Nov. 11, 1819. He was one of four children of Charles and Keziah Burnett. He received his early education in the native schools of his town; at the age of 15 he left his home and went to Worcester, where he attended the English and Latin schools. In 1837 he removed to Boston and associated himself with the late Theodore Metcalf in Tremont street. He served first as clerk, then as partner and later became the owner of the establishment. Afterwards he disposed of the stand to Mr. Metcalf and then began in a modest way the business of manufacturing flavoring extracts and other specialties, which increased so rapidly and successfully, until the name of his house enjoyed world-wide fame. The stand at 27 Central street has been known in this connection for many years.

In 1847 Mr. Burnett married Josephine Cutter, daughter of Edward and Ruth Cutter of Boston, and she survives him.

Mr. Burnett took great pride in his home at Southboro; it was forty-five years ago that he constructed the elegant stone mansion known as "Deerfoot," at great cost, the estate at his death embracing 500 to 600 acres. Since 1875, however, Mr. Burnett has spent his winters in Boston. He had enjoyed several European trips, his first being in 1851.

Though not an office seeker he had

served in many public capacities most creditably. Gov. Rice appointed him prison commissioner, and he served as chairman of the board which erected the Sherborn prison. He served on the Southboro school board and was the first road commissioner of the town; he was also chairman of the committee which built the Town Hall and was instrumental in planting many of the beautiful shade trees now adorning the streets.

Mr. Burnett was an Episcopalian of much prominence, and one of the best monuments to his memory is the St. Mark's Classical School, which he founded in 1865.

The parish known as St. Mark's was formed in 1860, and two years later, Mr. Burnett gave the stone church in which the society has since worshipped. He

time lost four of its most valued members. Mr. Burnett is called to his long home, and those of us who remain, with saddened eyes and heavy hearts pay the same tribute which he with us offered to the memory of those who preceded him. What a lesson is thus brought to us by these swift recurring afflictions! Joseph Burnett was a refined, high-minded and thoughtful gentleman. His spotless life will prove his most enduring monument."

It was moved and carried that a committee of five, including the president, be appointed to attend Mr. Burnett's funeral, and the following named members of the association were appointed: Dr. T. L. Jenks, F. A. Davidson, C. C. Goodwin and W. W. Bartlett. It was also voted that a committee of three be appointed to draft resolutions. The chair appointed Henry Canning, Professor G. F. H. Markoe and S. A. D. Sheppard a committee, and they brought in the following resolutions: The feelings of the association on this sad occasion can be expressed in no more fitting language than by quoting from the beautiful tribute drawn up by Mr. Burnett at the time of the death of his friend, Theodore Metcalf, "He made us all his friends, for he carried into every word and act a genial, generous nature, a manly courtesy and a sympathetic, loving heart. He was in the truest and best sense a Christian gentleman." May his life be to us a perpetual benediction. We extend to the family our sincere sympathy in a bereavement which is ours as well as theirs.

It was voted that the remarks of the president be placed on the records. Several other members of the association spoke of Mr. Burnett in words of love and esteem several of those who had been in his employ specially dwelling on his kindness and consideration to his employees.

THE MASSACHUSETTS COLLEGE ACTS.

At a meeting of the Massachusetts College of Pharmacy, of which Mr. Burnett was a charter member, held at Young's Hotel on the same day, George M. Hoyt, the vice president of the college, presided. It was voted that a delegation be sent to attend Mr. Burnett's funeral, and the following resolutions were adopted:

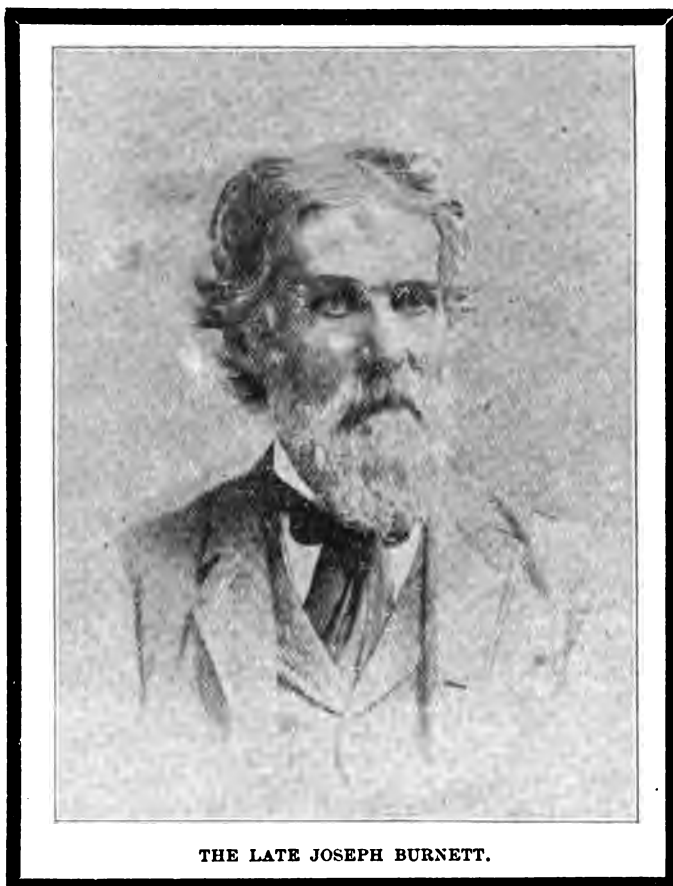
Resolved, That we are sensible of the great loss sustained by the decease of Joseph Burnett.

Resolved, That his ever constant help and advice have been a great factor in the development and growth of the College of Pharmacy, and that his memory will be permanently associated with its success.

Resolved, That his kind, gentlemanly, cheerful and generous qualities are cherished as a living fountain to his memory.

Resolved, That we tender to his afflicted family the sincere condolence of ourselves and the College of Pharmacy.

The funeral took place at St. Mark's Episcopal church, Southboro, on Aug. 15. The simple and impressive service was conducted by Bishop Lawrence, assisted by Archdeacon Converse of Boston and Archdeacon Chambre of Lowell. Music was furnished by the surpliced choir of Holy Trinity church.



THE LATE JOSEPH BURNETT.

was at the time of his death treasurer of the corporation and of St. Mark's school and president of the standing committee. For nearly 30 years he has generously made up any deficiencies that occurred in the church finances.

He has been vestryman of St. John's Church, Framingham, and of St. Paul's, Hopkinton. He was also one of the original corporators of the Church of the Advent, Boston.

The Commercial Club of Boston loses one of its 50 members in the decease of Mr. Burnett.

THE BOSTON DRUGGISTS' ASSOCIATION.

A meeting of the Boston Druggists' Association was held at Young's Hotel at two o'clock on August 14, to take action on the death of Mr. Burnett, who was a member of the association. Professor James F. Babcock presided. In his opening address he said—

"Our association has within a short

The bearers were Hon. Edward Burnett, Rev. Waldo Burnett, Robert M. Burnett, John F. Burnett, Charles Burnett, son of the deceased, and Joseph Burnett, grandson.

A special train from Boston carried many prominent friends of the deceased. Among the druggists noticed beside the committee from the B. D. A., were Prof. G. F. H. Markoe, Amos K. Tilden, B. O. Wilson, H. T. Weeks and Seth W. Fowle.

SUNDAY CLOSING.

Your last issue mentioned the fact that Charles R. Garrett of Everett had kept his store open on Sunday for the purpose of testing the Sunday law. The result as far as the lower court is concerned is just the opposite of the memorable Cambridge contest. At the trial the chief of police testified in regard to seeing people enter the store Sunday morning and call for cigars and soda. Garrett asked them if they wanted it for medical purposes, and, if they answered in the affirmative, they could get what they called for, but, if they said in the negative, he refused to sell them. Garrett was fined \$50 and costs. He appealed and the result of trial before a jury is awaited with much interest.

FLY-CATCHING MICE.

There is something new in the way of a fly-trap look in the window of the drug store at the corner of Tremont and Eliot streets. At almost any hour of the day and night, from one to four rodent quadrupeds can be seen prancing over bottles of tooth powder and syrup of squills and tincture of turpentine and sweet spirits of rhubarb and the other useful articles usually displayed in such places in a wild attempt to capture the *musca domestica*.

The mice are simply out fly-fishing. A card has been placed in the window in self-defense, which reads: "Fly Trap Not For Sale." This was done after the doorstep had been worn half way through by a line of people coming in to inform the clerks that the window was full of mice. The mice have been in the window for three years, says one of the clerks who has seen that length of service for the druggist, and he doesn't know how much longer. In the winter they live by gnawing off the labels in the store that are glued on with starchy paste.

The mice by this time have become quite tame, but they never leave the window except when the store is closed. They have proved themselves to be real conveniences. When the store gets unpleasantly full of flies, the clerk drives them into the window, and then the mice have luncheon. People gather at these times just as they do at the circus when the animals are fed. The best fun comes when the mice make after a horse-fly; there is a great race, and once caught the mice tear the fly's wings off and bolt everything else. In this way a great pile of wings have accumulated.

The recreation of these mice consists in running up and down the curtain cord at a lightning pace, causing the patrons of the neighboring saloons to rub their eyes and finally to avoid that side of the street altogether.

NOTES OF INTEREST.

Charles H. Hitchcock, of Tremont street, is to have one of Tufts' "Greenwich" fountains.

P. B. Sullivan is the proprietor of a new Fall River store. His fountain is of the Low Art Tile pattern.

It is said that there will be a new drug

store downtown soon and the same rumor fixes the location on Court street.

Joseph M. Cobe has opened a new store on Blue Hill avenue. He purchased his fountain from James W. Tufts & Co.

S. A. Bouvier of Woonsocket, R. I., is refitting his store and among the new things is a fountain from the Low Co., of this city.

Frank M. Frost, corner of Shawmut avenue and Brookline street, has added a Tufts' fountain to his establishment.

Springfield is to have a new store. It will be presided over by John L. Dale, and the fountain is from the manufactory of J. W. Tufts & Co.

W. H. Grimes of Gloucester and S. Cushman & Sons, New York City, have contracted with the Low Art Tile Co., for new fountains.

M. A. Gagnon of Worcester, who was recently burned out, is placing his store in order again, and the refitting includes a Low Art Tile fountain.

John Toy, 195 Pleasant street, and Maurice O'Donnell, Inman square Cambridge, have just received sixth-class licenses from the board of aldermen.

One of Boston's daily papers is responsible for the rumor that the license commissioners of Waltham will soon turn their attention to the druggists of this latter city.

Hon. Gorham D. Gilman, of Gilman Bros., and resident consul of Hawaii, arrived at Honolulu a short time ago. He will spend several weeks in visiting this group of islands.

The Low Art Tile Co., anticipates a large business in "hot soda" goods this winter and the list of apparatus which this concern is prepared to show the trade includes several new patterns.

The Boston Summer Hospital, which opened a short time ago, is progressing finely. The degree of success which it has attained is due in no small degree to the generous contribution of medical stores by the T. Metcalf Co.

J. W. Reeves of Cambridge, Mass., representing the Inter State Retail Druggists' League and New England Druggists' Union has been working hard through Vermont, having obtained over 100 names and also showing a sheet of signatures over six yards long.

James H. Thompson, Ph.G., whose store is at the corner of Washington and Brookline streets, is spending the summer abroad, accompanied by his family. He is at present enjoying the delights of Southern Germany and at the same time transacting some business in connection with property recently left to his wife. During Mr. Thompson's absence his store is presided over by two members of the class of '94, M. C. P., Alfred W. Balch and Irving Nute.

H. F. Boutwell, of Main street, Fitchburg, was complained of in court for the illegal keeping of liquor. While upon the stand, testifying in his own behalf, he said that sometime since he purchased a large quantity of liquor, which he stored in his own house for a time, but later sent it back to Boston. The chief of police evidently thought this story worth investigation, for while Boutwell was still on the stand, he went to Boutwell's house and found and took away a job-wagon load of liquors. Boutwell was convicted upon the charge in issue, and it is said that he will soon be obliged to appear in court again on another charge.

NEW ENGLAND NOTES.

A. F. Wadkis's drug store at St. Johnsbury, Vt., was seriously damaged by fire recently.

Frank L. McKeown is to have a Tufts' fountain in the new store which he is to open in Portland, Me.

A new drug store is about to be opened in Portland, Me., by Charles A. Harkins, who will draw soda from one of J. W. Tufts' fountains.

One of the plate glass windows in Holland's drug store, corner of Congress and Grove streets, Portland, Me., was recently broken by a runaway milk team.

W. A. Robinson, of Auburn, Me., has just placed an order with C. H. Bangs for new mahogany fixtures, and he is also a recent purchaser of a Tufts fountain.

The Twenty-first Annual meeting of the New Hampshire Pharmaceutical Association will be held at Nashua on Tuesday and Wednesday, September 4th and 5th.

W. A. Robinson & Co., the Auburn, Me., druggists, will soon open another drug store in the new Dingley block on the corner of Hampshire and Troy streets, Lewiston. Ernest F. Weed will be in charge.

O. B. Cutting's store at West Concord, Vt., has been robbed. The thieves secured about \$15 in small change, but were frightened away before they had an opportunity to take anything else, though they had apparently prepared to carry the typewriter away with them.

A. O. Nutter has sold his interest in the Blaine, Me., drug store to Geo. W. Young. The firm name will remain the same as before, A. J. Fulton & Co. Mr. Nutter will be found next door with a new stock of groceries and provisions. He has removed the post office from the drug store to his present place of business.

A. P. Shelden of Willisborough, N. Y., has purchased the store occupied by Dr. J. D. Tanner in Winoski, Vt., thoroughly refitting and relighting it and having it conducted under the name of Shelden's Pharmacy, under the management of A. J. Evans. Mr. Shelden will take alternate trips between the two stores.

Ex-Postmaster Arthur C. Randall of St. Johnsbury, Vt., has decided to go into the drug business. He will succeed his brother, E. N. Randall, as proprietor of the Randall drug store, so long one of the business landmarks on Railroad street. He will not be a stranger to the business, a large part of his active life having been spent in the store.

Maine commissioners of pharmacy held their bi-monthly examination in the council chamber of City Hall at Portland on August 8. Commissioners Frank R. Partridge of Augusta, and Noble C. Earle of Portland were present and conducted the examination. There were four candidates present at the examination, only one of whom belonged in Portland.

Ernest E. Moeller and Paul Krenzlin, have formed a partnership and opened a first-class drug store in McKenna's block, at the corner of Grand avenue and Franklin streets, New Haven, Conn. Mr. Krenzlin was head clerk for F. B. Brill, who conducted a drug business at the same stand for years. He made himself not only very popular with the people of that section but also became thoroughly familiar with the trade.

PENNSYLVANIA.

PHILADELPHIA, Aug. 21.—The end of the tariff struggle in the Senate and House of Representatives and the general belief that the President will sign the bill, or that it will eventually become a law, has caused a small revival in drug circles in this city. For a long time the drug trade has been in a state of 'desuetude' with no immediate signs of relief; as it is the change has been effected when it was least expected, and since the tariff bill has gone to the President there has been a rush to buy certain drugs which are affected by the new bill.

The greatest activity is displayed by the dealers in alcohol. This spirit is considerably affected by the new tariff, as the revenue rate has been advanced. In anticipation of the bill becoming a law, there has been a rush by all parties who had alcohol in bond to withdraw it. This has created quite a rush on the various bond houses, but it is understood that nearly all of these goods have been removed. In view of the advance in the revenue rate on spirits the price of alcohol has sharply risen. The cost to manufacture a gallon of this spirit is fixed at 88 cents a gallon, and with the revenue attached, which is about \$2.06 a gallon, it is estimated that the price by 10-barrel lots will be about \$2.44. Outside of this item there are very few drugs that are adversely affected, but the price of castor oil will no doubt be from 35 to 40 cents a gallon cheaper.

TAX-FREE ALCOHOL.

The Hoar amendment, which was to exempt all alcohol used in the arts and sciences, got through, notwithstanding it was understood that an amendment should be attached to this clause of the bill, but as the House was rattled and afraid that any change might defeat the bill, they agreed to it knowing that this clause would be hard to enforce. There is at the present time, some talk of getting the druggists together and endeavoring to perfect such a bill as will allow the free use of alcohol, but before this is accomplished there will have to be considerable legislation.

THE PARK MATTER AGAIN.

M. M. Kline, chairman of the Proprietary Committee of the N. W. D. A., has been notified that John D. Park Sons & Co. of Cincinnati, has sent out notices to the wholesale druggists of Cincinnati that they will have no further dealings with the wholesale druggists of that place. In consequence of this the Proprietary Committee of the N. W. D. A. has decided to put in a complete line of odds and ends not usually carried by wholesale druggists, to enable all the houses there to fill orders complete without depending on Park Sons & Co. The Committee has also learned that this house is getting a large portion of its supplies from a prominent cutter in Chicago.

MERE MENTION.

W. E. Burk has gone with his wife to Barnegat; he will remain there several weeks.

Charles M. Edwards, who represents Gilpin Langdon & Co., has just returned from a successful southern trip.

H. B. French is spending a few weeks at Highland Lake. Mr. French is one of the firm of Smith, Kline & French Co.

J. N. Hillan has taken possession of the well-appointed pharmacy at the northwest corner of Market and Thirteenth streets.

Mrs. H. C. Ashmead, who conducted the store corner of Twenty-first and Fitzgerald streets, has opened a new one at 15th and Venango streets.

Robert T. Young mourns the loss of his father. Mr. Young has one of the leading stores on Chestnut street, being located on the southwest corner Sixteenth and Chestnut streets.

The drug store 1427 E. Susquehanna avenue, which is conducted by Wm. J. Shaeffer, has been refitted, painted and greatly improved. It is now one of the handsomest stores in this section of the city.

S. Cohen, proprietor of the Terminal Pharmacy at Twelfth and Market streets, has this suggestive advice framed in front of his place of business: "Good soda-water says: 'come in'; Poor soda-water 'Good-bye.'"

A. S. Wickham, who conducts his store at Sixth and Race streets, and previous to that was manager for George B. Evans, has just had placed in his store a handsome soda water fountain, besides making a number of improvements to the interior.

Monroe P. Lind, of the firm of Schandeln & Lind (Garwood perfumes) is looking after the trade in Boston. Mr. Lind has been very successful on all his trips and each year the fame of their perfumes reaches different sections of the country.

The store at 11th and Berks streets, which was some time ago purchased by Dr. E. Wilson, has been sold to Dr. J. Grier Long. Dr. Wilson gave up this business to accept the position of Western agent for Keasby & Mattison, with headquarters at Cincinnati.

Dr. Daniel G. Brinton of this city has been elected president of the American Association for the Advancement of Science. He is a scientist of international repute, and recently represented this government at the Spanish exposition at Madrid, held in honor of Columbus' discoveries.

Thomas S. Wiegand, the genial actuary of the Philadelphia College of Pharmacy, is spending his vacation in the West, visiting Pittsburg, Cleveland and other cities in that section. He will be back in his office by September 1, and will be in demand by a host of students anxious for information about the coming term.

A. G. Burk, representing Alfred Wright, perfumes, has just finished his vacation and started away for an extended trip. Mr. Burk is one of the most esteemed salesmen in the business, and as he is in the pink of condition, and ready for a hard winter, there is no doubt but that he will render a good account in the way of sales when he returns.

Notwithstanding Johnson & Johnson have a very large plant at New Brunswick, N. J., it does not meet all the requirements of their business. To facilitate matters it is the intention of this firm to enlarge their building by the erection of an additional story making a four story building instead as now a three story one. Work is to be begun at once.

Alonzo Robbins, who, in addition to conducting a retail pharmacy at 11th and Vine streets, has been president of the Pennsylvania state pharmacy examining board since its creation by the legislature, has just recovered from a severe spell of sickness due to overwork. In addition to attending to his own duties as president, he did the secretary's work, and the strain was too much for him.

The professors at the College of Pharmacy are all diligently at work on the revision of text books for the coming term.

Professor Remington finds vigor for application at Longport, south of Atlantic City; Professor Trimble is conveniently close to the city, living in the beautiful suburb of Bala, on the Pennsylvania railroad, and Professors Sadtler and Bastian are at home. The books now being revised answer an admirable purpose at college, and are standard works in use by progressive pharmacists.

The new tariff schedule on Turkish sponges will not affect prices of such luxuries materially. The cut is from 20 to 10 per cent., but as American sponge houses have practically tabooed the old style Turkish goods, being able to get the public to accept a fine domestic article, the Turkish sponge is rapidly becoming a rarity in stocks of pharmacies. It takes an expert, anyhow, to tell just what kind of a sponge is being handled, and the tariff does not figure in such cases.

James D. Kearns, a well-known druggist of Pittsburgh, died July 10. Death was caused by hemorrhage, the immediate result of an ulcer in the stomach. Mr. Kearns had been seriously ill for only three days, although he had not been well for some time. The deceased was born in Greentree borough 68 years ago, and was educated at the old Duquesne academy and at Jefferson college, now Washington and Jefferson college. He had been in business at the corner of Fifth avenue and Grant street for 36 years, and was one of the best known men in the two cities. His wife died three years ago.

Powers & Weightman, the well known manufacturing chemists of Philadelphia, say in a circular issued under date of August 21, that in consequence of the great advance in alcohol and the uncertainty as to legislation connected with the internal revenue tax on distilled spirits, they are somewhat at a loss to determine figures for alcoholic preparations. They have advanced sulphuric ether 5c. and spirits nitrous ether 2c. per pound, but as stocks of alcoholic preparations have become considerably reduced it should be understood that these prices are not binding in any way upon them, being given merely to indicate advances that have already been made, and as an intimation of higher prices for the future.

The assignment of Queen & Co., manufacturers of optical goods, which has been announced, was received with regret by leading business men of the city. The firm's reputation is well-known in pharmaceutical circles, especially among the microscopists. At a meeting of creditors, the fact was brought out that one main cause for embarrassment was that an immense stock of goods had to be kept on the shelves which included many articles only required by scientists at rare intervals. The amount of capital tied up in this way was a considerable item, and, when business depression came on, it was found to be impossible to sell what had been manufactured. As the firm was always to be relied on for unusual necessities, it is seen that professional men were accommodated to a degree which probably never entered their minds. A plan was agreed on by the creditors to allow Queen & Co. to endeavor to resume business, and it was stated that, at the end of three years, 100 cents on the dollar would be paid, without interest. A committee of business men and bankers was appointed to take charge of affairs with the understanding that, should there be a further deficit of from \$10,000 to \$15,000, liquidation shall be in order without delay. The Chemical Bank of New York is one of the heaviest creditors, its claim being \$30,000.

MARYLAND.

BALTIMORE, August 21.—The last meeting of the Maryland Pharmaceutical Association ('93) adjourned subject to the call of the president; but the condition of its affairs and the lagging interest of its members made it injudicious to call a meeting during a year when the World's Fair was the absorbing topic of its members' time and money. There has however been an interesting circular call issued by the President, Dr. Jno. Briscoe, requesting that its members attend the annual meeting, which is to be held at Pen Mar, on the Western Maryland Railroad, on Aug. 29 and 30, when some interesting papers and matters for discussion are promised. As intimated in a previous letter there is not the full interest manifested in the association that should be expected. It would seem to be the duty of every pharmacist to ally himself with his State Association for his pleasure and profit.

DEATH OF GEORGE F. DANNETTEL.

Geo F. Dannettel, who was graduated from the Maryland College of Pharmacy in 1866, died at his late residence, corner Broadway and Gough street, Baltimore, August 14, after a lingering illness of several months, in the 49th year of his age. He had been to the mountains in hopes of recuperating, but his disease (consumption) had advanced too far to be checked by human efforts, and his symptoms becoming more alarming he insisted on returning to his home, where he died a few moments after his arrival. Mr. Dannettel was a remarkable example of modest worth; well informed and thoroughly experienced in the business of pharmacy which he conducted upon ethical principles. He was unobtrusive but devoted to his duties and his family. As a prescriber he had the full confidence of the medical profession and was highly esteemed by the general public. One with whom he had been employed for more than eight years said of him "He was the most conscientious, industrious and competent assistant I ever had, with a memory accurate in detail of minor events of business and thoroughly honest in every particular." Another with whom he had been for sixteen years said "He was the best man I ever knew." He did not make his impression felt in an ostentatious way, but his example will be appreciated by those who knew him and his memory will be revered by his many friends.

A NEW CONFIDENCE GAME.

WILLIAM A. CLEARY, Ph. G.
City Post Office,
Care of General Delivery,
City.

Speak and Write
German
French
Spanish

References

The above is the form of an application made by a plausible individual to a number of Baltimore pharmacists. The applicant deserves credit for the uniqueness of his game and the consistency of his story. He introduces himself in a very familiar manner and seems to be well acquainted with the representative pharmacists in the various cities. After claiming your attention he then writes what he cannot audibly utter, viz: "I have no money for food or lodging, and any cash you may be able to contribute will be gladly received." By means of this he has succeeded in getting several dollars or so apiece from a number of pharmacists. But he has played his game a little too long in one locality. The other day he approached a German, who reports that his German was

very poor. At another store he was confronted by a Frenchman, but with him he couldn't *parlez*. This aroused suspicion and as he had given as references, the Wm. S. Merrell Co., of Cincinnati and the Cincinnati College of Pharmacy and several others, inquiry was made regarding him and replies of a like tenor were received, of which that of Parke, Davis & Co.'s may be cited as an example: that "If a man has made the representations you say, he is either a lunatic or a liar." Well, he succeeded in making us charitable when times were hard, and now we are waiting for him—with an axe. He may try his game in other cities, so look out.

MINOR NOTES.

Dr. H. H. Imhofe, 800 Sharp street, has closed his store and gone into the practice of medicine.

Alonzo R. Todd, M.D., has qualified before the commissioners of pharmacy and will conduct the store corner Hanover and Henrietta streets.

August Schrader and family, 2920 Elliott street, have taken the sea trip to Boston as a healthful summer recreation. They left Baltimore on the steamer Fairfax on August 7.

John Christ, corner of Essex and Pater-son Park avenue, had the pleasant experience of having his store converted into an emergency hospital on the night of August 17. A wagon containing members of a band were returning from a picnic when it was struck by a Green Line electric car No. 419. The phaeton was against a telegraph pole and broken into small pieces. The fright to the occupants was great and the injuries of three members consisted of scalp wounds, sprained arms and a fracture of the right knee. They were treated by Mr. Christ and sent home.

ILLINOIS.

CHICAGO, August 21.—The combined effects of the settlement of the strikes and the settlement of the much-mooted and long awaited tariff issue has resulted in great temporary benefit to the Chicago drug houses. All retail houses have for a year been running on the lowest stocks possible, ordering only enough to meet the existing demand and not ordering any stock ahead. All business has been holding off awaiting the results, but none more than the drug trade, as it is so dependent on the general conditions that it is virtually a thermometer and barometer in one.

There are many new features under the changed condition of things. The credit man has always been an important factor in the successful operation of a wholesale drug house, as he is in all wholesale houses; but at this time he is especially valuable to the drug house. This summer and fall a radical change has come over the policy of nearly every large house in the country, in the direction of credit trade. The dealers who have been slow when business was good and who have given evidence of dilatory neglect are now being turned down, and turned down hard. Credit is being refused men who have been customers for years, simply because the houses cannot at this time afford to take the risk and because there is no positive assurance that the dealer is not ready to go to pieces on account of the hard times.

THE BUSINESS OUTLOOK.

On the other hand, many inquiries are coming in for estimates on new stocks, fixtures, and everything which would

intimate a healthy strengthening of the trade. Many of these are new beginners, but many of the old timers are preparing to extend their business, and will re-fit and modernize their establishments. While the tariff is by no means satisfactory or acceptable to all, there is a general feeling that the question is settled, at least for a time, and this produces a feeling of relief and confidence. The drug trade in itself is but little affected, except on spirits, and the inland markets will only see trivial changes. In the meantime, orders are coming in thick and fast, and the delivery clerks are about the busiest in the establishment.

THE ASHEVILLE MEETING.

Albert E. Ebert, one of the members of the local committee on transportation, has issued an earnest and lengthy circular calling attention to the annual meeting of the American Pharmaceutical Association at Asheville, N. C., Sept. 3-8. Accompanying the call is an exhaustive and elaborate description of that beautiful country and the treat in store for those who attend the meeting.

PHARMACEUTICAL MEETINGS.

Nearly all of Chicago has been in convention, either at Racine or Peoria. At the latter point the Illinois Pharmaceutical Association held a three days' convention, during which a number of important subjects were discussed, but little action was taken. The convention adjourned after selecting the following officers for the ensuing year: President, Fritz Lueder, Peoria; Vice presidents, I. S. Arnold, Watseka, G. F. Lutringer, Petersburg and Elmer E. Day, Elgin; Secretary, Frank Fleury, Springfield; Treasurer, Dr. H. Lee Hatch, Jacksonville. The names of W. W. Sawyer, Rockford, W. Parker, Quincy, and C. J. Behrens, Chicago, were selected to be presented to the governor for appointment on the State Board of Pharmacy, to succeed L. C. Hogan of Chicago, whose commission expires this year.

THE ILLINOIS PHARMACEUTICAL ASSOCIATION.

The fifteenth annual meeting of the Illinois Pharmaceutical Association, held at Peoria August 14, 15, 16, was largely attended. The convention opened with an address of welcome by Mayor Miles, a response by H. H. Greene, of Bloomington, and the annual address of President Emil Thiele, of Chicago. Reports were received from R. W. Dodds, of Springfield, on legislation; H. W. C. Martin, of Chicago, on United States Pharmacopoeia; W. K. Forsyth, of Chicago, on papers and queries; W. Bodemann, of Chicago, on Trade Interests and Inter-state League; A. C. Hattenhauer, of La Salle, on prize essays, and T. A. Patterson, of Chicago, on unofficial formulæ.

The delegates were handsomely entertained and the meeting was enjoyable as well as more closely establishing the relations of the members.

THE WISCONSIN PHARMACEUTICAL ASSOCIATION.

The convention of the Wisconsin Association was a great and glorious blowout of the first water. Everything was on a broad gauge and harmony and good feeling prevailed from start to finish. There was not a hitch anywhere and business was blended with recreation and jollity. The accommodations were excellent, according to those who attended, and the local hospitality was unbounded. Chi-

cago was well represented by those in charge of exhibits and by the regular Wisconsin men. Owing to lack of space, a number of exhibits were not displayed, but no one felt hurt. An idea of the fun the men and their wives had may be formed from the following synopsis of the last day's happenings as gleaned from the reports of a local paper.

The pleasant ride put the druggists in good humor for the reception and banquet in the evening. At an early hour the Hotel Racine presented an animated appearance. Decorations were elaborate and the whole was brilliantly lighted and presenting an enchanting scene. Interspersed between the dance numbers the various contests took place. They were mostly humorous and everyone enjoyed them. A prize was awarded Paul C. Biersach of Milwaukee, as the best singer, at a local entertainment and then came the contest between several dignified gentlemen to decide which could sew one yard on an apron the best and quickest. A local druggist finished first, but was disqualified by the decision that basting is not sewing. The Sea Island twine binding contest resulted in many blistered fingers and there was some embarrassment and doubt in awarding a prize of a set of fine bath brushes to the traveling man most in need of them. The best natured, most popular, strongest pervaricating and other accomplished members received prizes. But there was also some amusing dancing. Boat races and ball playing proved to be exercise that had its after effects on the men not hardened, and the efforts of these martyrs to glide gracefully failed miserably. The last day was a busy one for all. In the shooting contest some of the participants demonstrated their inability to hit a flock of barns. A crutch race, tug-of-war, standing and running jump, running backward, jumping from the edge of a brick, and a boxing contest were features of the occasion. Some of the ladies engaged in the sports and made the fun all the more enjoyable. Driving tenpenny nails, running with an egg in a spoon, racing and throwing a ball, were the tests that tried their abilities. Tom Ballard, of Morrisson, Plummer & Co., through the connivance of his wife, signed for the prize awarded the heaviest couple at the meeting, but his trap shooting nearly resulted fatally. In the evening the fun makers arrayed themselves in sheets and pillow cases and serenaded every druggist in town and paid farewell respects to the Mayor. All in all, it was one of the jolliest and most harmonious meetings ever held, and everyone enjoyed it hugely."

MERE MENTION.

W. C. Good has sold his drug store at Fifth and Capital avenue, Springfield, to Mr. Beckley, formerly of Havana.

Joseph P. Plummer, superintendent of Morrisson, Plummer & Co. is spending his vacation in Central Illinois.

Chas. R. Dickerson, cashier for Lord, Owen & Co., is spending a month's vacation among Colorado resorts.

Geo. S. Lord, of Lord, Owen & Co., and family have returned from a ten weeks' trip through the United Kingdom.

C. F. Yates and W. A. Sallade, Wisconsin representatives of Morrisson, Plummer & Co. have been in the city several days.

H. C. Peters, for a number of years a prominent druggist of Ottumwa, Ia., is in the city looking for a location or an opportunity to buy a store.

Alderman E. R. Saylor, of Springfield, has sold his drug store at No. 609 South Eleventh street, to E. E. Stout, of Auburn, an old and experienced druggist.

Lou J. Meyer, the Utah and Colorado representative of Lord, Owen & Co., has returned to his field after a ninety days' visit at his old home, Fort Wayne, Ind.

Al Weber, formerly of the firm of Bancraft, Weber & Co., Hot Springs, has opened one of the most complete pharmacies in Chicago in the Hyde Park Hotel.

L. A. Lange, secretary and T. C. Ballard, superintendent of the notion department in the establishment of Morrisson, Plummer & Co., attended the Racine convention.

A new drug store at Delavan, Wis., is being fitted out by Morrisson, Plummer & Co. It will be run by Will Davis, for a number of years with W. J. Stratton of Elkhorn, Wis.

The Hart Manufacturing Company of this city have the contract for putting one of their patent tilting front soda fountains in Al Weber & Co.'s new Hyde Park hotel drug store.

Chas. L. Pratt, the owner of Pratt's patent cigar case, has placed the Chicago agency with Lord, Owen & Co. The cases are a great convenience and the trade is taking advantage.

Articles of incorporation have been filed for the Harvey Medical College of Chicago, with a capital stock of \$25,000. The incorporators are James A. Stough, Chas. D. Camp and Dr. Geo. W. Reynolds.

Knowlton & Bennett, on the corner of Race and Main streets, Urbana, are making marked improvements in their place of business, and when the fall trade opens they will be fixed up clean and new.

A new company has been incorporated at Chicago to do a general drug business. The incorporators are William A. Dyche, Geo. B. Dyche, Frank B. Dyche and D. R. Dyche. The company starts with a capital stock of \$30,000.

MICHIGAN.

DETROIT, August 21.—Trade conditions in Detroit are somewhat improved since two weeks ago. The tariff question has been practically settled, although the final form of the bill is not satisfactory to many who do not regard it as an improvement on the McKinley bill. A better feeling already prevails here and now that there is a solid basis for work, it is expected that certain lines of industry will improve with a rush. Some who are optimistically inclined even go so far as to predict a boom, which only means a return to normal conditions. It has been a mystery how many of the firms here have been able to tide themselves over this period of depression. It is certain that the majority have been steadily losing money. Expenses however, have been cut down in every way possible and credits have been looked after rather sharply.

EFFECT OF TARIFF SETTLEMENT ON TRADE.

A young druggist asked the AMERICAN DRUGGIST correspondent what effect the settlement of the tariff muddle would have on the trade and said that he had noticed no material falling off in his business since a year ago. He was indeed fortunate and an exception to the general rule, although it is true that the trade has been less affected than some other lines, notably the jewelry and kindred

trades. He maintains however, that there are altogether too many druggists in Detroit and a large number of them have started in during the last year. This fact accounts for the numerous small chattel mortgages that have been filed. The retail pharmacist has a great deal to contend with but he has certainly been more fortunate than his neighbor who buys and sells luxuries.



ALBERT M. TODD.
Nominee for Governor of Michigan.

The Michigan Prohibition Convention has nominated Albert M. Todd, the well-known peppermint grower and oil distiller, of Kalamazoo, for Governor of Michigan. Mr. Todd is so well known to the pharmacists of this country that a short sketch of his life will not be out of place here in connection with his probable political future. He was born in St. Joseph county, Mich., forty-four years ago. After receiving a good common school education and attending the Northwestern University for two years he commenced the battle of life on a farm. He is now the most extensive grower, distiller and refiner of essential oils in the United States. To the members of the New York State Pharmaceutical Association he is well known from his paper on "The Treatment and Distillation of Peppermint Plants," which he presented at the tenth annual meeting at Catskill, July, 1888. Mr. Todd is regarded as an energetic, honorable and successful business man. He has always taken time to keep posted regarding current affairs, and is a more than ordinarily close student of the science of civil government. He is a gentleman of pleasing address and will make a popular candidate for the high office for which he has been nominated.

A CANADIAN PHARMACIST ON PATENT MEDICINES.

J. E. D'Avignon, the Windsor pharmacist just across the river from Detroit, has returned from Toronto. He is one of the examiners of the Canadian School of Pharmacy which recently held a session at that place. A number of important matters were discussed and in speaking of one of them he said:

"I think we will have to give up the sale of patent medicines and confine ourselves to the legitimate drug trade. As a result we will have to be better educated so as to be able to do it. The patent medicine business does not belong to us at all and I think that we have been doing an injustice to the public for years by keeping these preparations and endorsing them. We should be pharmacists and not dealers in patent medicines."

There is no doubt but that Mr. D'Avignon's idea is in harmony with those of a large number of his American brothers. It is asking too much, however, to ask a radical change in this respect, and if it ever takes place it must be in a gradual manner. All would have to agree to taboo patent medicines or the scheme would only breed internal dissensions. The Detroit trade is not making much money out of patent medicines just at present, as all the pharmacists are selling on a strictly cut rate basis. Many of them say that this line of goods is more bother than it is worth.

MINOR NOTES.

H. L. Vaughn, of Petoskey, will shortly purchase an interest in a drug store at Lake City.

R. H. Shotwell, of Leslie, will shortly move into more commodious quarters in that city.

Petoskey's telephone exchange has been transferred from Foster & Burke's to the drug store of M. J. Erwin.

Charles G. Granacher, druggist, at 473 Gratiot avenue, Detroit, has renewed a chattel mortgage for \$2,000.

Frank A. Koesel, druggist at 597 St. Aubin avenue, Detroit, has given a bill of sale to Herbert A. Hoffman.

Pharmacist Vastbinder, formerly of Newberry, is now in charge of the prescription department of Sorsen & Sodergren's drug store at Red Jacket.

George R. Scoville, of Manistee, has removed his stock of drugs from its present location to the Salling Block on River street.

The store of William Godley, one of the oldest druggists in Ecanaba, was closed by creditors on August 15. He is well known all through the northern part of the state.

Pharmacist Sarsen of Red Jacket left last week for a visit to his parents in Finland. He will be gone about ten weeks and while abroad will visit the principal cities of Europe.

Dr. V. Lanberth, representing Nelson, Baker & Company, of Detroit, recently started on his annual trip to Central and South America. He will be absent until next January.

Will Haskin of Imlay City has purchased the old Pioneer drug store building at that place and will start a merchant tailoring establishment. This building is one of the landmarks.

Jas. A. Bassett, representing Williams, Davis, Brooks & Company, of Detroit, recently called on the trade in Bay City and Saginaw. He reports a good trade throughout the State.

Numerous changes are being made in the Foot drug store at Charlotte, and when the improvements are completed there will not be a more commodious pharmacy in Eaton county.

Donald Robertson, Detroit, has given a bill of sale on his stock of drugs and fixtures at 368 Fort Street west, to John B. Morris & Company. The consideration mentioned was \$700.

John G. Hackney & Company, druggists at 91 Grand River Avenue, Detroit, recently gave a bill of sale to Betsy Tilley for a consideration of \$1,000. The business will hereafter be conducted by the lady herself.

Abel Olson, formerly in charge of the drug store, corner Seventh street and Western avenue, and owned by Fred Brundage, is now in Marquette, where he has taken a position in Fornham's drug store.

Bay City merchants were recently victimized by a clever stranger who passed forged checks on them. Among the losers was E. Von Hermann, druggist. He wasn't alone, as there was some twelve or fourteen others.

The Ameel-Brennan Company of Mt. Clemens, recently filed a chattel mortgage in favor of John Hinchman, of Detroit, as trustee for certain creditors. It was last week foreclosed, and John Babcock of that city has the business in charge.

W. H. Burk, who conducts a drug store at the corner of Grand River avenue and Orchard street, Detroit, is not such a soft mark as some people might think. Erwin H. Moore tried to pass a confederate \$10 bill on him recently. The boy was apprehended and is liable to spend a term in State prison.

The band out at Parke, Davis & Company's big establishment, has gained almost a State reputation and is in great demand for all sorts of festive occasions. Together with Detroit Division No. 8, Knights of Pythias, they recently gave a moonlight excursion to Lake St. Clair on the steamer Pleasure.

George Chantler, of Manistique, has up to this time conducted a jewelry business with his drug trade. He now announces that he will sell his interests in the latter, and hereafter confine his attention to his prescription counter. He has come to the conclusion that a man must do one thing well if he wishes to succeed.

Frederick Stearns & Company, the Detroit manufacturers, say that their traveling salesmen are all out and that they are getting their share of business. The firm express themselves as being well satisfied with the trade outlook and say that a general revival in business must take place this fall.

F. W. Droelle, representing Parke, Davis & Company, was in Marquette recently, taking orders for his firm. He has not been in that city for over fifteen years and was considerably surprised at the evidences of improvement on every hand and especially in the business in which he is most interested.

G. S. Frenzelle, a prominent druggist of Saginaw, died on August 6 at that place, of consumption. He was twenty-six years old. Mr. Frenzelle was well known to the trade throughout the State. He was a member of the Masons, Knights of Pythias, Odd Fellows and Foresters. He was formerly engaged in business at Mayville and was buried in that village with Masonic rites.

It is said that the Auditorium at Detroit has been rented to an eastern syndicate for the first three weeks in January for the purpose of holding a food exhibit. It is proposed to obtain the use of the ground floor of the Light Guard Armory for kitchen purposes. The "Exhibit" held here last spring was a huge success and the coming show will be on a more extended scale. Many foreign manufactures will be represented.

A. B. Way & Company, who purchased the drug stock of Dr. King at Ovid a few months ago, has sold the stock and fixtures to E. B. Beebe, who has moved the same to his store there. Mr. Beebe now owns the largest drug store in Clinton county. Mr. Way has accepted a position with him as clerk. Both of them are competent pharmacists, and through the present proprietor's thrift and careful dealings, a trade has been built up that is surpassed by few in that county.

John R. Long, who says he is worth in personal estate, about \$50,000, but who is only twenty years old, last week petitioned the probate court to allow him to invest \$20,000 in the business of manufacturing paints at the Peninsular White Lead and Color Works on Lieb street, Detroit. He wants to go into partnership with Oliver D. Goodell, a paint manufacturer of considerable experience, John V. Moran, Williams, Davis, Brooks & Company, and Far-rad, Williams & Clark, manufacturing chemists. The judge granted his request. It is not known how soon the new establishment will be in operation.

MISSOURI.

ST. LOUIS, Aug. 18, 1894.—This city is at present writing suffering from severe hot and dry weather, it having been several weeks since we had a good rain.

THE ALUMNI AND THE STUDENTS.

At a recent meeting of the alumni of the St. Louis College of Pharmacy it was decided to extend the privileges of the library to the students of the college, and also make the library more accessible to all. With this object in view a committee was appointed, with C. Klipstein as chairman. A large central room at the college is soon to be fitted up as a reading room. There will be a long table in the center of the room, besides convenient receptacles all around the wall for periodicals, etc. The books are all kept in cases in an adjoining room. As soon as arrangements are completed a librarian will be in attendance and have the library open part of each day, or at least several hours a week. The association now have quite a large library, presented by members and friends.

THE DRUG CLERKS' EXCURSION.

It has been a long time since such a large, select party turned out as for the drug clerks' excursion on the 8th inst. There were three thousand persons on the boat, which was the limit the boat was allowed to carry, and several hundred arrived at the landing a few moments too late, the boat having left as soon as they took on the limited number.

The regular monthly meeting of the society was held at the College of Pharmacy building, on Thursday, August 16, at 8:30 P.M. About thirty members answered to roll call. Fourteen new members were elected and nineteen new names proposed for membership. The committee on constitution and by-laws reported that five hundred copies of the pamphlet had been printed. Mr. E. A. Winkelman was appointed as a committee of one to work the south end of the city for new members.

It was decided to give what might be called a basket picnic at our beautiful suburban summer resort, Meramec Highlands, on August 30. This will be a general outing for the clerks and their friends. The society also decided to hold one meeting every three months for social benefit. This will be held on a regular meeting night. A bureau of information was established whose business is to assist drug clerks in securing positions, to show visiting drug clerks over the city, etc. Anyone desiring information of this kind is invited to address O. F. Mack, care of Meyer Bros. Drug Co.

REGULATING THE SALE OF MILK.

The Dairy Commission of St. Louis recently presented a bill to our Municipal Assembly providing for the sale of skim milk, also for the sanitary inspection of dairies, etc., within the city. The bill failed to pass. The principal objection the mayor offered in vetoing it was a large portion of the milk sold within the city comes from outside the city limits and no provision was made for sanitary inspection of these dairies. The city health department instructed Dr. Homan, a member of that department, to appoint a committee to aid him in drawing up a suitable bill, governing the sale of milk, standards, tests, sanitary inspections etc. The following committee was appointed: Dr. C. O. Curtman, Dr. Albert Merrell, Dr. James M. Deete, city chemist, Dr. Tikeman and Dr. Homan.

NEWS ITEMS.

E. W. Sennewald has returned from his trip north.

J. J. Holscher has bought the store formerly owned by H. L. Ritchie at Ewing avenue and Manchester road.

Mr. Reis of the Reis Drug Co., Bellville, Ill., was in the city a few days ago buying goods and visiting old friends.

Julius C. Koch, pharmacist at Shenandoah and Jefferson avenues, has a very young pharmacist in his family.

R. S. Johnson, head of the city department of the Meyer Bros. Drug Co., has gone to New York on a two weeks' vacation.

Chr. Schoffer, pharmacist at Gratton and Choteau avenues, looks at least five years younger since his trip to Denver, Col.

G. C. Mining, a St. Louis College of Pharmacy graduate, has bought the Cote Brilliant Pharmacy at Academy and Easton avenues.

Dr. J. C. Falk was recently kicked by a horse and was confined to his bed for several days, but he is now able to be at his office again.

Ed. Mitchel, who has charge of the traveling salesmen of the Meyer Bros. Drug Co., has gone to Colorado on a two weeks' vacation.

The Missouri Board of Pharmacy hold their next meeting in St. Louis, the first Monday in October; this to correct the error in last issue.

H. T. Hassebrock, J. F. C. Hassebrock, Dr. H. M. Whelpley, and their wives, attended the meeting of the Illinois Association at Peoria last week.

Dr. C. O. Curtman has just completed the revision and enlargement of his "Chemical Analysis," and expects to soon have it ready for distribution.

Geo. Reber, Twenty-second and Carr streets, is spending a day or so with his family at Shelbyville, Ill., where his family are spending the summer.

Leo R. A. Suppan, one of our college graduates and now a student of chemistry at the State University, came up to St. Louis to attend the drug clerks' excursion.

Henry Braun, druggist at Seventh and Choteau avenue, has just returned from a six weeks' trip through the West. The last three weeks were spent at Manitou, Colorado.

C. G. Penny, pharmacist at Twenty first and Market streets, has just returned from a three weeks' sick list vacation at French Lick Springs, Ohio. He says he lost 21 pounds in the three weeks.

The W. S. Merrell Drug Co., are now furnishing a very nice stock of goods for Fred H. Swift's new store at Vandeventer avenue and Olive street. Mr. Swift expects to be open ready for business in about ten days.

Frank Werner is opening a new store at Shenandoah and Second Carondelet avenue. Mr. Werner was for some time in partnership with Julius Weinsburg at Tenth and Lafayette avenues, but recently dissolved that partnership.

Invitations are out announcing the marriage of J. A. Guttman to Miss Minnie Pauli, the ceremonies to be celebrated at Lafayette Park Presbyterian Church, at 8 P.M., August 20. Mr. Guttman was a member of the class of '94 of the St. Louis College of Pharmacy, and since graduating he has had charge of the prescription department of one of our leading drug stores.

Dr. Richard Kring, who sold his store at Thirteenth and Lynch streets last spring and went to California, has recently returned to St. Louis. His brother, a prominent druggist of Los Angeles, came back with him for a short visit.

Mr. F. M. Norris, North St. Louis, city salesman for the Moffitt-West Drug Co., has gone east for a two weeks' vacation. It is rumored that there was a special attraction for Mr. Norris down east, which he will probably bring back to St. Louis with him.

Otto F. Truble has recently placed a pair of the latest improved torsion balance upon his prescription counter so that people living in the neighborhood of Jefferson and Choteau avenues, will now be sure of getting exact weight at their corner drug store.

Wm. Augenmueller, head clerk for H. F. A. Spilker, at 1801 Choteau avenue, departed on the morning of the 12th for a two weeks' fishing trip up the Illinois River. Mr. Spilker says it is against his religion to hire a relief clerk, so he will do double duty while his clerk is away.

The secretary of the Missouri State Pharmaceutical Association, Dr. H. M. Whelpley, says he has a few copies of the proceedings of that organization for 1888-91-93, which he will be pleased to mail interested parties if they will inclose postage, 5c., to him, care Meyer Bros. Drug Co.

Henry Hoelke quit the drug business a few years ago with the avowed intention of never re-entering it, but we find him installed as manager of the prescription department of the Friedwald drug store, 2738 Choteau avenue. He says there are many worse lines of business than filling prescriptions.

There will be quite a delegation of St. Louis druggists to attend the meeting of the American Pharmaceutical Association at Asheville, N. C. They are already stirring around looking up the best routes, etc. Prof. James M. Good, Prof. Francis Hemm, Dr. H. M. Whelpley, and Prof. Hinrichs, all of the St. Louis College of Pharmacy, will undoubtedly attend.

Trade Notes.

A useful assortment of circulars, show cards and descriptive matter relating to the Montserrat Lime Juice can be had upon application of any reader to John M. Chapman & Co., 105 Hudson street, New York, who are agents for the consignees of this the most popular brand of lime fruit juice.

Some handsome samples of the new perfumes of Ed. Pinaud—Aurora Tulip and Paquita Lily, two exquisite odors which have caught the fancy of the "smart set," are being sent out to the druggists of the country. If you wish to be included in the list send a postal card to that effect to Ed. Pinaud's importation office, 42 East 14th street, New York.

A very useful book on Elixir making, said to cover the whole subject in plain, precise, working formulas, is being sent out free to druggists by the Royal Chemical Co., P. O. Box 1728, New York City. Every druggist will find it to his advantage to procure a copy of this little work which will be cheerfully sent free of cost if the AMERICAN DRUGGIST is mentioned in making the request.

The special attention of our readers is directed to the advertisement of C. G. Bacon & Co., wholesale druggists and

chemists, 20 College Place, New York, which appears in this issue. All who open accounts with this well-known firm are assured of high grade goods, prompt shipment and close prices. We would advise all who make a feature of close buying to correspond with C. G. Bacon & Co. regarding prices on such goods as bulk fluid extracts, quinine, naphthalene flakes and balls, insect powder, cod liver oil and vanilla beans.

Seabury & Johnson, Seabury Building, 59-61 Maiden Lane, New York, call attention in this issue to Seabury's new airtight aseptic container for medicated bandages, cottons, gauzes, etc., which received a special award at the World's Columbian Exposition, Chicago, 1893. These containers are recommended for cheapness, lightness, elegance and durability. The point is made that by their use the antiseptic present remains unimpaired.

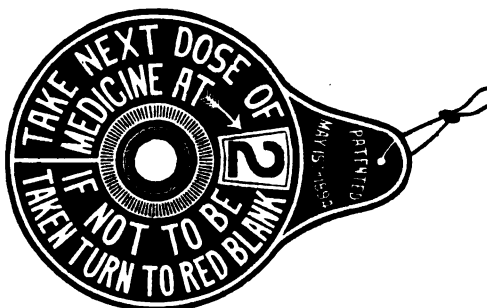
The Continuous Flow.

Druggists are frequently requested for an opinion as to the most desirable makes of fountain syringes, and where the one questioned has failed to familiarize himself with the latest improvements in these articles it is not unlikely that his answer will lead the customer astray. The names of the "Alpha" and "Omega" syringes are simple enough to be easily remembered, resembling in this respect the construction of the syringes themselves, which is exceedingly simple.

The point is made that they are made with no more parts than the old style or ordinary syringes, and unlike fountain, rubber bag, or pump syringes the flow is not only continuous, but can be made either gentle or strong at the will of the user, the pressure of the thumb and forefinger being sufficient to produce a full stream. These are syringes which the druggist can recommend with the utmost confidence.

A New Dose Card.

Gillams' Sons, the well-known Philadelphia lithographers and makers of cork tops and embossed envelopes, are introducing a clever little device to serve as a dose card. It consists of two circular pieces of card board on which are engraved a series of figures ranging from 1 to 12, and a couple of sentences which indicate the use of the device. We should judge from its construction that the time



indicator was intended for use either as a cork top or to be suspended from the neck of the bottle. The device appears to be simple and inexpensive, and evidently intended for free distribution to customers by the pharmacist. Samples can be had upon application to Gillams' Sons, Philadelphia, Pa., if the AMERICAN DRUGGIST is mentioned at the time of writing.

THE MEETING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

Written for the
American Druggist and Pharmaceutical Record—
THE BOTANICAL ATTRACTIONS OF ASHEVILLE.

By HENRY KRAEMER, Ph.G.,
Reporter on the Progress of Pharmacy.

Some time ago the editor invited me to write an article for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD on the botany in the vicinity of Asheville. To do this would have afforded me much pleasure had I the time at my disposal both to look up the flora and to write out my results. Though unable to give the matter serious study I may mention some of the things of interest, that I recall at the present writing.

On the sides of the road, of every drive I take, the shrubs laden with chinquapins are abundant. There are many persons in and around New York and farther north who have never seen this plant. (*Castanea familia Michx*) which is closely allied to the chestnut. The fruit is similar to that of the chestnut, the nuts are ovoid pointed, however, and about half as large as a common chestnut. At Richmond Hill the sweet-smelling Solidago (*S. odora*, tit.) is now exceedingly abundant. The other day I had the pleasure of seeing *Trautvetteria palmata*, Fisch. and Mey. with its corymbose white flowers. *Lysimachia Fraseri* Dury is also found, although it differs from any of the published descriptions save in that it possesses the brownish ciliated margins to the segments of the calyx. *Polytmia Uvedalia*, L., is now in its prime. The yellow fringed orchis (*Habenaria ciliaris*, R. Br.)—likewise at its best. *Tecoma radicans* the cultivated "Trumpet flower" of the north grows here wild, with its red flowers and spindle shaped points and is indeed a refreshing sight. *Passiflora incarnata*, L., with its large purplish flowers, may be seen along the railroad tracks.

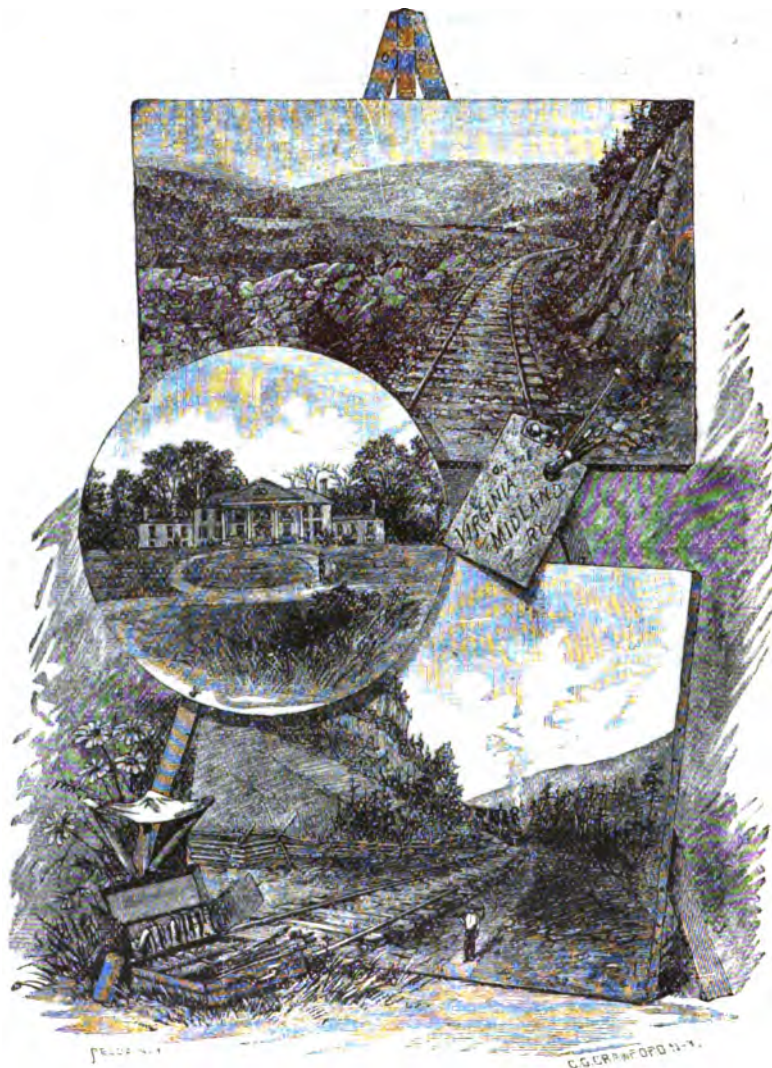
Among other interesting things may be mentioned, *Cassia Marylandica*, L., several species of *desmodium* and *Lespedeza* *Clematis Viorna*, *Anemone cylindrica*, *Aconitum uncinatum*, *Cnicopega racemosa*, *Silene virginica*, *Ilex mollis*, *Astragalus canadensis*, *Apocynum tuberosa*, *Rosa carolina*, *R. lucida*, *R. humilis*, *Crataegus oculus*, *C. crus galli*, *C. flora* and *C. parviflora*, *Polygonum hydropiperoides*, *Aletris farinosa*, *Calopogon pulchellus* and a host of the commoner plants.

Some few of the trees down here are magnificent. The oaks, chestnuts, walnuts, hickories, pines, etc., of many species, are well represented. A little more than a month ago the sight presented by the Rhododendrons and Kalmias along the French Broad River was truly beautiful. The fields are just now in a transition stage and in a few weeks will be covered by the compositae—many of which are our most attractive and showy flowers. A collection of plants of North Carolina is of considerable value to the botanist, for here are to be found a great many plants whose characters will not correspond to those given for the plants in the manual which they undoubtedly are. Either the plants are quite different from those further north or the descriptions in the manuals are very incorrect. The other day my attention was directed to this want of conformity in the common *erigeron canadensis*, L. The involucre being composed of two rows of unequal scales,

the pedunculate heads are not naked, but from it arise leaf-like projections.

It will be remembered that the mountains of North Carolina have been explored by the well known botanists, Michaux & Son, Pursh, Nuttall, Gray and others. Considerable interest has been manifested in this region within the past few years by some of the members of the Torrey Botanical Club and more especially by the enterprising gentleman in charge of the nursery work at the Vanderbilt estate.

that had been sent from the Wallace Brothers of Statesville. One of these collectors—whose name I have at this time forgotten but who is residing somewhere in the upper part of New York—had gathered it from an unexplored work in the mountains and it was sent to Dr. Gray for identification. The specimens commanded a fabulous price at first, but this was reduced as afterwards considerable quantity was found. Other plants likewise rare are being searched for. Only the other day a collector for the second time returned from Table Mountain without having obtained *Hudsonia montana*—but having procured the only thing that resembled it—*Selaguetta rupestris*. There



EN ROUTE TO ASHEVILLE—BATTLEFIELDS ON THE VIRGINIA MIDLAND DIVISION OF THE SOUTHERN RAILWAY.

The search has been in the main directed towards rediscovery of some of the little known plants, records of which were made by these older botanists. Many will remember the ripple of excitement regarding shortia. Dr. Asa Gray was looking over the herbarium of Michaux in Paris when he came across a small, broken and imperfect specimen marked simply "from America." He became interested in the plant and from the material described it as *shortia glacifolia*. No living specimens were to be had. Years went by until one day there was heard a shout of "Eureka" by Dr. Gray as he laid before his associates at Cambridge a specimen of a plant

is excellent collecting down this way, if one gets into the mountains, and very valuable finds may be expected if one possesses knowledge, energy, and good fortune.

Report of the Committee on Transportation.

The Committee on Transportation for the forty-second annual meeting of the American Pharmaceutical Association, which convenes at Asheville, N. C., on Monday morning, September 3, made an effort to obtain a uniform rate of one and

one-third fares to the place of meeting from all points within the United States. The requests for the special association rate were granted by the Southern Traffic Association, the Trunk Line Passenger Association, the Boston Passenger Committee and the Central Traffic Association. The Western Passenger Association, including the roads to the northwest of Chicago, could not be induced to grant the desired rate, claiming that the probable attendance from that section did not warrant the reduction.

The members of the committee at Chicago, Atlanta, and New York have issued printed circulars giving the information necessary to the guidance of the members and visitors from their respective sections. Extracts from these circulars are reproduced below.

FROM NEW YORK.

The Committee on Transportation for Delegates and visitors who desire to attend the meeting of the American Pharmaceutical Association, which convenes in Asheville in September next, herewith report that they have made a thorough investigation

the Southern Railway, "Piedmont Air Line," via Danville and Salisbury.

SPECIAL NOTICE.

Arrangements have been made so that parties holding tickets to Asheville or Hot Springs, via above route, can have same honored to return via Richmond, Va., and York River Line up the Chesapeake Bay to Baltimore, giving an opportunity of going and returning by different route, so as to enable them to see the various sections of the Southern Country; or, those desiring to return by the same route and take a side trip to the Natural Bridge can do so. Arrangements have been made to sell round-trip tickets from Lynchburg to Natural Bridge, Va., at \$2, for parties holding excursion tickets via above route. Special through car service is being arranged to leave New York on the afternoon of Saturday, September 1st, 4.30 P.M., arriving in Asheville the afternoon of the following day, 4 o'clock.

ALTERNATE WATER ROUTE

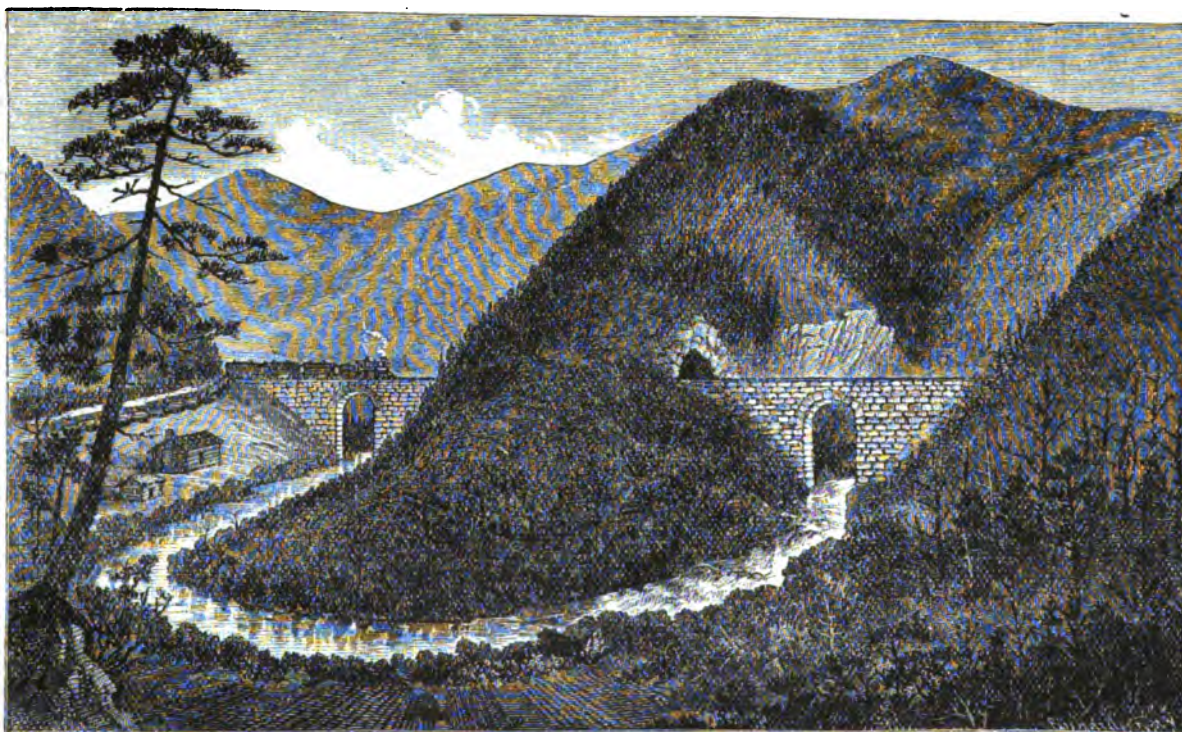
One of the handsome new steamers of the Old Dominion Line of steamers will sail from Pier 26, North River, at the foot of Beach street, New York, on Thursday afternoon, August 30th, at 3 P.M., arriving at Old Point Comfort at 10 A.M., Friday. Time will be given there to view Fortress Monroe and the Indian schools at Hampton, to enjoy a surf bath and to take lunch at the Hygeia Hotel. At 4 P.M. the party will leave by rail for Richmond, arriving there at 6.30 P.M. A few hours can be spent in visiting the spots of historical interest in this city,

in Atlanta, Ga., has issued a circular, from which the following is taken:

After full consideration of the matter of route to Asheville, I take pleasure in announcing that I have made arrangements with the Southern Railway (formerly R. & D.) to furnish such sleeping car accommodations as may be found necessary to comfortably accommodate our party.

The Southern Railway is the only line running to Asheville, and affords a most agreeable route through the mountains of North Carolina. The scenery along the line is very beautiful. Four branches of the Southern Railway center at Asheville: From the North via Salisbury, N. C., the train reaches Asheville at 4 P.M. From the West via Paint Rock and Hot Springs trains reach Asheville at 8.27 A.M. and 2.15 P.M., the latter train having through Pullman sleeping cars from Cincinnati. From the South leave Atlanta 8 A.M., arrive Spartanburg 4.11 P.M., or leave Atlanta 12 noon (vestibule train, Pullman cars only,) arrive Spartanburg 6.22 P.M., leave Spartanburg 8.15 P.M., arriving Asheville 11.20 P.M. From Jacksonville, Savannah, etc., through Pullman cars, leave Jacksonville 7 A.M., F. C. & P. Ry., Savannah 11.45 A.M., Columbia, 5.10 P.M., Southern Railway, arrive Spartanburg 8.10 P.M. and Asheville 11.20 P.M., at Spartanburg unite with parties from the South via Atlanta.

The train service and equipment of the Southern Railway is excellent in every particular. Asheville is a summer tourist point to which summer excursion tickets are sold from all the principal points. Some of which are shown below:



EN ROUTE TO ASHEVILLE—VIADUCT IN THE NORTH CAROLINA MOUNTAINS.

as to rates, routes, etc., and on account of the excellent through train and car service, and other facilities en route, offered by the Pennsylvania Railroad and the Southern Railway, Piedmont Air Line (formerly the Richmond and Danville), have decided on this as the official route from the North and East, to Asheville, N. C. A report as to the western territory will be issued as soon as the local members have perfected their arrangements.

The rates made for this occasion are one and third fare upon certificate plan, or if desired by members or visitors they can purchase round-trip tickets to Hot Springs, N. C., good to return for 90 days, with stop-over privilege at Asheville or any other point on the line. The summer excursion rates from the principal points in the North and East to Hot Springs, N. C., are as follows:

From New York, via Pennsylvania R. R., \$30. Sleeper to Asheville, \$5; From Philadelphia, via Pennsylvania R. R., \$26; From Washington, via Southern Railway, \$20. Sleeper to Asheville, \$3.

The cost of these summer excursion tickets are about the same as upon the certificate plan. Where summer tickets are not on sale purchase a ticket to Asheville, taking a receipt from the ticket agent for the money paid. On presenting this ticket, countersigned by the secretary, to the agent at Asheville, a return ticket will be furnished over the same route at one-third the regular fare. The special rate is open not only to members but also to any visitors who may choose to avail themselves of it.

See that your tickets read from Washington via

the party leaving via the Southern Railway at midnight and arriving at Asheville on the next day, Saturday, at 4 P.M.

The fare for the round trip is \$28, which includes meals and stateroom while on the steamer. The sleeper charge from Richmond to Asheville is \$3.

Those who contemplate taking the trip, and desire further information should address Alex. S. Thweatt, Eastern Passenger Agent, 271 Broadway, New York, or any member of the Committee.

CASWELL A. MAYO, Chairman, 37 College Place, New York.

FROM CINCINNATI AND THE WEST.

Though no formal report has been issued by W. J. M. Gordon, that gentleman has arranged for a special train from Cincinnati to Asheville to go over the Queen and Crescent route. This train will leave on the evening of September 1, and will carry the excursionists from points west and north of Cincinnati as well as those from the immediate vicinity of that city.

FROM THE SOUTH.

Harry Sharp, member of the committee

From New Orleans.....	\$27.00
Mobile.....	24.00
Montgomery.....	17.70
Selma.....	17.70
Vicksburg.....	27.00
Jackson, Miss.....	26.60
Meridian.....	22.75
Birmingham.....	17.15
Memphis.....	23.85
Columbus, Miss.....	22.10
Greenville, Miss.....	22.15
Jacksonville, Fla.....	23.55
Brunswick, Ga.....	20.05
Waycross.....	20.05
Albany, Ga.....	19.10
Savannah.....	14.25
Augusta.....	10.35
Athens, Ga.....	10.50
Macon.....	14.90
Atlanta.....	10.50
Rome.....	13.00
Chattanooga.....	12.45
Nashville.....	19.00

Similarly low rates from other points. Those who do not buy round trip tickets as above should buy one way tickets to Asheville and procure certificate from ticket agent, which when signed at Asheville by the Secretary, will be honored for return trip at one-third fare.

Further particulars and information furnished by any of the railway officials, or by the Transportation Committee.

FROM CHICAGO.

Albert E. Ebert, member of the committee in Chicago, has issued a circular, of which the following is the essential portion:

The Committee on Transportation have arranged the following:

We leave the Chicago depot (Illinois Central), corner of Michigan avenue and Park Row, at 9.00 a. m. on Saturday, September 1st, via the Big Four Route, for Cincinnati, arriving there in time for the evening train of the Queen & Crescent, which is due at Asheville Sunday afternoon at 2.

En route we will be joined at Indianapolis by the contingent delegations from St. Louis, Peoria and other cities, and at Cincinnati our train will be a special for Asheville.

The train leaving Chicago will be made up with parlor, chair, sleeping coaches and hotel dining car. The fare to and return will be \$27.15 on the certificate plan.

The Headquarters of the Association will be at the Battery Park Hotel; rates \$2.50 per day. Will you come and bring your family and friends? All are invited and will be welcomed, for there is room for all in the land of turpentine pines.

Each member of the committee having notified the pharmacists in his section by

Leaving Philadelphia some of the most beautiful and highly cultivated farm lands of the country are traversed, but night shuts out the view and when the travelers arise in the morning they will have passed through that charmingly quaint old-time city; Alexandria, and have traveled over many historic battlefields, including those of Rapidan, Orange Court House, Brandy Station, Culpepper, Bull Run and Manassas. When the travelers awake on Sunday morning they will be in the midst of the tobacco belt, for from Danville, which will be reached at 5.40 A.M., from thirty to forty million pounds of tobacco are shipped every year.

IN TOBACCO LAND.

Danville is the point also where the route of those who go down by sea will become the same as that of the railroad tourists.

At Salisbury our party leave the main lines between New York and New Or-

grim satisfaction, into the great tunnel, 1,800 feet in length, which crowns the very summit of the range. In this tunnel a spring, as if uncertain of its location, divides its water, sending part to the West and to the Mississippi, and part to the East and the Atlantic. From a curve just before the tunnel is reached it is possible on a clear day to see the tracks at seventeen distinct points below, so tortuous has been the ascent. But from the tunnel down on the west side of the range the scene changes from one of wild grandeur to one of picturesque and peaceful beauty. Great masses of rhododendrons, azaleas and laurel bank the slopes, and the valleys, spreading out, present a widening view of pastoral loveliness, until almost at the junction of the beautiful Swannanoa and the far-famed French Broad Rivers the prosperous city of Asheville appears in view. Nature has so encircled this beautiful city with rugged mountains that the traveler, coming from which di-



EN ROUTE TO ASHEVILLE—PICKING COTTON—SCENE ON THE SOUTHERN RAILWAY.

circular of the arrangements made, it has been deemed unnecessary to issue in circular form any general report.

CASWELL A. MAYO,
Chairman.

New York.

Southward from New York.

The journey southward from New York whether by sea or by rail will prove a delightful one. The New England delegation coming down to New York city in a body will leave Jersey City via the Pennsylvania line at 4.30 P.M., on the same train with those delegates from New York City and vicinity who decide to go down by rail.

The route from this city to Philadelphia is no doubt familiar to the majority of those who will go. While devoid of picturesque effects the scenery is not monotonous, the swift flight of the railway train over what is probably the finest piece of road-bed in America, bringing to view rapid alternations of town and country, of fertile undulating meadows and of prosperous manufacturing villages and handsome suburban residences.

leans and take the Western North Carolina Division running through Statesville, Hickory, Morganton and Old Fort, where the tortuous ascent of the Blue Ridge Mountains begins. From this point, which is marked by two massive walls of rock between which the Linville River joyously dashes as if glad to have at last reached the plain, the scenery becomes more and more sublime. The train, drawn by the two powerful locomotives, creeps like a huge serpent over wild chasms and heights so dizzy as to make one shudder as he looks into the yawning abyss below. On every side, mountains clothed from base to dome with pines and balsams, add inspiration to the view, while cascades of sparkling brilliancy dash down the mountain side almost upon the train.

THE MOUNTAIN TOPS.

At last Round Knob is reached, and a stop is made as if to give the panting engines a moment's rest before attempting the final great ascent to the summit of the range. And then on again, and up and up, higher and higher the ponderous engines labor, fairly groaning under their burden, until finally plunging, as if with

reception he may, has presented to him, with kaleidoscopic changes, a panorama which for sublimity and grandeur is surpassed in but few spots in the world.

THE OCEAN TRIP.

But some of our tourists, weary with the heat and dust of city life, will woo old ocean's breezes and for these, if Boreas be kind, there waits a great joy.

No more beautiful harbor save one, indents the Atlantic coast than that whose Southern sea wall is Sandy Hook. Dotted with white sailed yachts, taper-spurred merchantmen, bustling tugs and stately steamers with possibly a stray man-of-war lying grim and silent at anchor off the Staten Island shore, the harbor is always full of vivid interest and of suggestions of far-off countries and of other skies than ours.

As the steamer goes down the bay, the whole of the lower city crowded with commercial and historic interest passes as in a panorama. The last point of interest is an old, low, round structure far-famed as Castle Garden, where Jenny Lind first sang in America under the management of the redoubtable P. T.

Barnum. Then she passes Governor's Island, and gathering headway, steams swiftly across the upper bay and through the Narrows between Forts Hamilton and Wadsworth, and past the round brick building near the eastern shore known as Fort Lafayette.

As the steamer sails outside of Sandy Hook, the New Jersey coast resorts pass in review one by one, the brilliant electric lights along the Board Walk showing the location of Asbury Park, which is passed near nightfall.

After a substantial and well served supper the travelers will seek convenient nooks sheltered from the wind, where till far into the night they may sit watching the far away glint of a distant light house or the dancing green spark that shows a graceful bark inward bound, mayhap with silks and teas after a half-year-long voyage round the Cape.

OLD POINT COMFORT.

On Friday morning as the ship comes in between the capes of Virginia with the sunlight glinting on the waters of Hampton Roads the tourists will see the spot where in the contest between the Merrimac and the Monitor the future of naval warfare was determined.

Landing on the government dock a walk of a hundred yards leads to the Hygeia Hotel, uniquely famous the world over. Depositing their hand baggage, the delegates may wander across the moat into the shaded enclosure of the most beautiful of the fortresses of the United States, Fort Monroe. The wide spreading live oaks that adorn the parade ground will probably be a novelty to many of the party.

FORTRESS MONROE.

Here will seen cozy and even elegant quarters, as in the officers club, fitted up within the bastions, and those who have a taste for history may see here the place where Jefferson Davis was a prisoner. After a brief glimpse within the fort some of the party may enjoy a dip in the warm and gentle surf that breaks on the lawn-edge of the hotel and then all will assemble for luncheon in the glass-walled dining room surrounded on three sides with water.

After lunch those who wish may drive over to the soldiers home and the Hampton Indian school maintained by the U. S. government.

The Chesapeake and Ohio Railroad has its Eastern terminus at Old Point Comfort and all take this excellently equipped road for Richmond, passing Newport News, a town which promises to be a shipping point of vast importance and which is the freight terminus of the Chesapeake and Ohio road.

THE CITY OF RICHMOND.

Richmond, which will be reached at 6.30 P.M., is a typical Southern city. Founded by that prince of colonial chivalry, Major William Byrd of Westover it has ever been a cavalier city. The founding of it is told in the delightful "History of the Dividing Line Between Virginia and North Carolina" where Major Byrd says "Major Mayo laid out for me a town just above the falls of the James which we called Richmond and thus we built not only castles but cities also in the air."

Here the party will have some hours for such sight seeing as can be done at night time, and will have an opportunity to meet some of those warm hearted Virginia gentlemen whose hospitality has made the name of the state a superlative in this connection.

Retiring at their convenience before the train leaves, 12.30 P.M., the travelers will find themselves in the morning speeding southward from Danville through the tobacco fields to reach Asheville at 4 in the afternoon of Saturday.

Mansfield Drug Co. Burned Out Again.

(Special to the AMERICAN DRUGGIST.)

MEMPHIS, Tenn., Aug. 22.—Fire started at 1 o'clock yesterday morning in a four-story building at Nos. 376 and 378 Shelby street, occupied by the Mansfield Drug Company, and within less than an hour's time nearly \$250,000 worth of property was destroyed. The fire started among the chemicals and oils in the rear of the Mansfield building, and spread so rapidly that the firemen soon lost control of it.

A general alarm was turned in and every engine in the city was brought to the scene. Finding that they could not subdue the flames, the firemen devoted their work to saving adjoining property and after an hour's battle succeeded in confining the fire to the block in which it originated.

The loss was fully covered by insurance, and but little interruption to business has been caused, the firm carrying on business in their new location without serious inconvenience.

This firm was burned out once before, about three years ago, and displayed great promptness and energy in getting their affairs into shape, as within twenty-four hours after the fire they had bought out the Jones Drug Co., and resumed the transaction of their business.

North Dakota Board of Pharmacy.

The Board met at Grand Forks August 9-16. The officers of the board are H. E. White, president; W. S. Parker, secretary and treasurer, and H. L. Haussamen. At the meeting a class of nine were present for examination, of whom five passed, as follows: Christopher Adamson of Cassel, W. J. Fee of Minto, G. H. Stevenson of Ardock, Paul Bilding of Northwood and J. M. Hotson of Grandin.

The following applications were registered without examination: Adolph Laack of Bismarck, J. M. King of Wahpeton, A. A. Ramage of Minto, G. C. Sabin of Fargo, C. J. Lee, Ph. G., Valley City; G. W. Marshall, Ph. G., Crystal; William Porterfield, Ph. G., Fargo; H. H. Bateman, Ph. G., Lisbon, Max Strehlow, Ph. G. of Kindred.

Assistants certificates were issued to G. K. Didrickson of Fargo, J. F. Mahoney of Bismarck, S. P. Craig of Minnewaukan, Hubert Petty of Abercrombie, John Holland of Hatton, Winfield Baldwin of Jamestown. The examination embodies materia medica, chemistry, pharmacy, identification of drugs and a thorough practical examination in compounding prescriptions and manufacturing simple pharmaceutical preparations.

North Dakota Association.

The ninth annual meeting of the North Dakota State Pharmaceutical Association was called to order in the United States court room, Grand Forks, August 7, by President C. R. Merideth of Casselton. Mr. Merideth's address to the association constituted the opening of the convention. His address partly consisted of a resumé of the work accomplished by the association, and congratulated the pharmacists

of the State upon the progress of the society. He was followed by Mayor Anderson, who welcomed the visiting pharmacists to Grand Forks, and tendered them the freedom of the city.

The morning session consisted of nothing more beyond these two addresses than the transaction of routine business. The reports of the various committees were read and discussed by the convention, which adjourned at the noon hour without completing this part of the morning program.

In the afternoon the committee reports were again taken up and disposed of. The report of the delegates to other associations were also received and read. At the election of officers held August 8, the following were chosen: President, O. Granrud, Grand Forks; Vice-presidents, A. L. Lien, Hillsboro; J. A. Lawrence, Wahpeton; secretary and treasurer, W. S. Parker, Lisbon; local secretary, G. A. Day, Fargo; Executive Committee, C. R. Merideth, Casselton; J. P. Hanson, Mayville; J. W. Lucas, Bismarck.

Names to be submitted to the governor for his consideration in making appointments on the state board of pharmacy: H. E. White, Jamestown; L. S. Irgens, Valley City; C. R. Merideth, Casselton.

Board of directors, H. L. Haussamen, Grafton; C. R. Merideth, Casselton; Robert Bergh, Grand Forks; G. A. Day, Fargo; D. F. Siegfried, Sanborn; A. L. Lien, Hillsboro; J. J. Wamberg, Hope; J. J. Freeman, Dickinson.

Following the election of officers the newly elected president, Mr. Granrud, was escorted to the platform by a committee appointed for that purpose by the president, and addressed the convention in a few well chosen remarks thanking the members for the honor. He followed with the announcement of his committees for the ensuing year, which include pharmacists residing in every section of the State.

The following were the delegates elected to the South Dakota Pharmaceutical Association; F. E. Bodle, Ellendale; C. N. Vallentine, La Moure; A. P. Slocum, Oakes.

To the Minnesota Association, J. H. Reynolds, Minneapolis; G. A. Day, Fargo; G. F. Peterson, East Grand Forks.

To the North Dakota Medical Association, L. Christianson, Fargo; H. L. Haussamen, Grafton; Robert Bergh, Grand Forks.

To the American Pharmaceutical Association, H. L. Haussamen; E. C. Lucas, Lisbon.

Foreign News Notes.

A physician of Harzburg, a small German watering-place, has been condemned to two months' imprisonment and 1,000 marks fine for slandering a colleague.

The thirteenth annual meeting of the Bavarian members of the Society of Applied Chemistry was held at Aschaffenburg, on the sixth and seventh of August. Papers were presented for the meeting by many prominent German chemists.

The scientific attainments of Professor Schlagdenhauffen of the Nancy Superior School of Pharmacy have been recognized by the French government, which has singled him out for distinction as a Chevalier of the Legion of Honor. Professor Schlagdenhauffen's name is well known to the pharmaceutical world in connection with his researches into the chemistry of kola nut.

ONE HUNDRED YEARS OF BUSINESS LIFE.

1794-1894.

A HANDSOME pamphlet containing a number of fine illustrations on calendered paper has just been issued by W. H. Schieffelin & Co., under the above title. The pamphlet is designed as a souvenir of the centenary of the foundation of the firm, and is intended to set forth the historical and commercial significance of this exceptional circumstance.

The history is divided into six periods or chapters corresponding to the changes in composition and name of the firm which have occurred since its foundation.

In describing the conditions which prevailed during the first period, dating from 1794 to 1799, when the firm name was Lawrence & Schieffelin, the historian does not restrict his pen to matters connected with the drug trade alone. The years embraced within this period constitute what is perhaps the most interesting era in the history of the United States.

LAWRENCE & SCHIEFFELIN.

It was at this time that the firm of Lawrence & Schieffelin was formed, and then began the history of the house still designated by the name of Schieffelin. It was in part the continuance of an important drug business which had its origin in the year 1781.

At that date Effingham Lawrence established himself as a drug merchant, and in the New York Directory for 1789 we find his address given as 227 Queen (now Pearl) street. Effingham Lawrence was directly descended from that William Lawrence of Flushing, L. I., who was fined in 1666 for being somewhat too independent in his views to suit Richard Nicholls, the English governor to whom, two years before, New Netherland had capitulated. John B. Lawrence, the partner of Schieffelin, was the brother of Effingham.

JACOB SCHIEFFELIN.

Jacob Schieffelin was the third of that name in America. In Europe the name and family have been traced back to Nordlingen in Germany and Geneva in Switzerland, as far as the thirteenth century. The first Jacob came to Philadelphia in 1745, married there in 1756, and Jacob the founder of this house was born in 1757. He traveled extensively, and being a loyalist, served during the war of the Revolution on the staff of the British General, Henry Hamilton. In 1780, he came to New York, which had been since 1776 in possession of the British, and continued so until 1783. Upon their evacuation of the city he followed the example of a host of other loyalist residents of New York, and went with the English army to Canada, engaging there in business.

He became an extensive merchant and importer at Montreal. But having married Hannah, the daughter of John Lawrence, of Queens County, L. I., and the sister of Effingham, Schieffelin returned to New York about 1794. In that year he bought out the drug business of his brother-in-law, and took into partnership with him John B. Lawrence another brother-in-law. The latter's name preceded, doubtless for the purpose of retaining the custom of the older house.

In the directory of New York for 1798, we find that Schieffelin's city residence was at 326 Pearl street. This was the historic Walton house built in 1754, which was made the illustration of an argument in Parliament to prove, during the anti-revolutionary agitations, the prosperity of the Colonies. This structure stood comparatively intact until 1881, when it was torn down.

Lawrence & Schieffelin's place of business was at 195 Pearl street, opposite what was then called the Fly Market at the foot of Maiden Lane. Schieffelin was the more enterprising of the two partners, doubtless because he had seen more of the world. He engaged in the shipping business—his first venture in 1795 clearing him the then considerable sum of \$25,090.

To this transaction Lawrence seems to have made no objections, but shipping was a precarious business in the days when the complications between Napoleon and the United States were assuming threatening proportions, and when England and France were seeking to blockade the trade of all the rest of the world. So

when later ventures turned out disastrously by reason of the capture of vessels, Lawrence withdrew, (in 1799) taking a clerk named Keese into partnership with him. Schieffelin went on with the drug business in his own name at the old address, 195 Pearl street, while in the Directory for 1800, we find Lawrence's store at 199 in the same street.

JACOB SCHIEFFELIN & SON.

Jacob Schieffelin, as the business grew upon his hands, took into partnership with him his son Henry Hamilton, named after his former General.

Henry Hamilton Schieffelin graduated from Columbia College in 1801. He studied law in the office of that eminent lawyer Cadwallader Colden. Afterward Mr. Colden and young Schieffelin made the tour of Europe together. They were in Paris when Napoleon I. was proclaimed emperor.

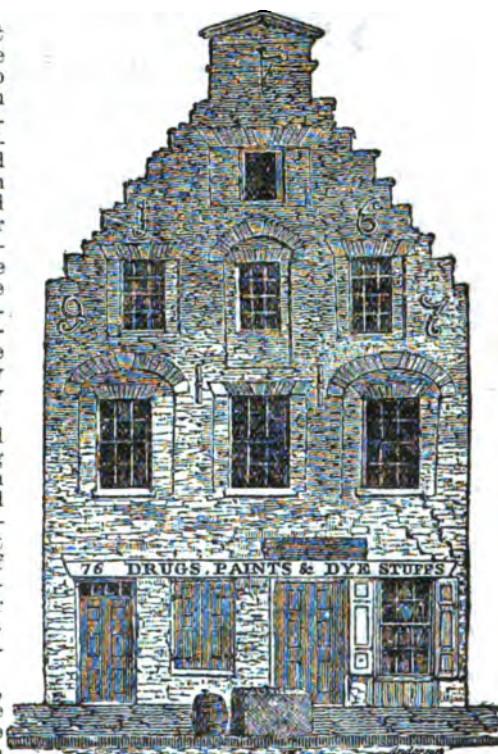
An old newspaper of July 3, 1805, which announces the admission of Henry H. into business with his father, also contains this advertisement.

"Warren Brackett and Henry H. Schieffelin, attorney at law, have entered



Schieffelin

In 1794, the National Government had no longer a seat in New York; it was located at Philadelphia, and Washington had entered upon the second year of his second term. Early in this year, John Jay, the Chief Justice of the Supreme Court of the United States, was sent on a special mission to England to effect a commercial treaty with that country. Though he accomplished his mission, great indignation was aroused against him and the treaty, and it was some time before sober, common sense prevailed and the force of events proved the treaty of 1794 to be the opening of a great era in the United States.



Drawn by Davis—Engraved by Anderson.

ANCIENT HOUSE IN PEARL STREET. BUILT 1626, REBUILT 1637, DEMOLISHED 1828.

into copartnership in the law business under the firm of Brackett & Schieffelin, and have opened their office at 193 Pearl street."

Previously, Henry H. Schieffelin had his law office at 128 Pearl street.

The business that Jacob Schieffelin & Son did was very heavy in those days. They had several buildings filled with drugs and other goods, besides the one they occupied at 193 Pearl street.

"Files of old newspapers show that they advertised largely, and that they did not confine their attention solely to drugs. An advertisement offers for sale 'Muscovado sugars,' 'coffee in hogheads,' (in those days they had a primitive way of

packing coffee, it seems). Also, 'a shipment of cotton, just received from Guadeloupe.' Also, 'just received from London, per *Oneida Chief*, one hundred barrels double refined saltpetre.' They also advertise for export three hundred barrels gunpowder and four hundred casks brimstone. Such quantities were unusually large for a merchant of that period."

In 1814, Jacob Schieffelin retired from business, leaving the management of

firm, necessity arose for yet more spacious quarters, and the firm established itself in 1841, at 104 and 106 John street. It may be noted that this was four years after the panic of 1837, so that we see that not only had the stress of that time been withstood, but it had not materially affected the progress of the business. In 1848 the firm purchased the large stock of Hoadley, Phelps & Co., and absorbed their extensive business. In 1849, Henry

SCHIEFFELIN BROTHERS & CO.

The period now under consideration marks many an important epoch in the history of the country. Prior to the organization of the firm in 1849 as Schieffelin Brothers & Co., the Mexican War had just been ended and gold had been found in California.

Just forty years before the great Columbian Fair, the echoes of whose praises are still in the air about us, the first World's Fair in America was held in New York. On July 4th, 1853, it was opened by President Pierce in the Crystal Palace, standing on the ground now called Bryant Park. For by this time rapidity of communication was bringing transatlantic countries nearer to us. The famous clipper-ships were forcing even England to admire American ship-building genius. Some of them crossed from New York to Liverpool in thirteen days. The Dreadnought in 1854, actually beat a Cunard steamer by more than a day. But in such a race, steam was bound to distance mere skill depending upon capricious winds. The Collins' Line of American ocean steamers was started in 1848. The English Cunarders had already begun the career that was to result in the marvels of speed exhibited during the year 1893. In 1858, electricity began to claim the ocean also for its field of operation. After heroic struggles, in the face of stupidity, indifference and ridicule, Cyrus W. Field made the first Atlantic Cable carry messages with the swiftness of thought beneath the waters from continent to continent. But after a brief and fitful working of somewhat over a month, the Cable suddenly failed to operate. In 1861, came the dreadful shock of internecine war, which desolated the land until 1865. The commencement of that year completed the period of the firm's existence under the style of Schieffelin Bros. & Co.

Of the four brothers, Samuel B. Schieff-

NOTICE

THE CO-PARTNERSHIP OF LAWRENCE & SCHIEFFELIN, Druggists, of this city, dissolve this day by mutual agreement. All persons having any demands against them, are desired to call on Jacob Schieffelin, the proprietor of the Store of Drugs and Medicines, No. 195, Pearl-Street, for payment, and those who are indebted to the concern, are requested to make immediate payment to the said Jacob Schieffelin, who is authorized to receive all debts that are outstanding.

New-York, October 18, 1799.

JOHN B. LAWRENCE,
JACOB SCHIEFFELIN

THE INSPECTED STORE OF

DRUGS & MEDICINES,

No. 195, Pearl-Street, near the Fly-Market, one house from the corner: late

LAWRENCE AND SCHIEFFELIN.

In addition to the former Stock on hand, is now replenished by an extensive and general assortment of genuine DRUGS and MEDICINES from Europe, and sold as usual, Wholesale and Retail, on the lowest terms, for cash, country produce, or credit, by

JACOB SCHIEFFELIN,

Who hath purchased his Partner's Share in the said Store.

affairs to his son Henry Hamilton. The other partners were his brothers Effingham and Jacob, Jr., the style of the firm being H. H. Schieffelin & Co.

Jacob Schieffelin died in 1835, and was buried in the family vault of St. Mary's (Episcopal) Church at Manhattanville, of which he had been the first warden.

H. H. SCHIEFFELIN & CO.
(1814-1849.)

The thirty-five years embraced in the period of the firm's history which we have now reached, were to see great advances in every direction.

A feature of importance not only to the city, but we may truly say to the whole country as well, was the establishment of the great New York daily papers, which fell within this period. The *Commercial Advertiser* (1797), the *Evening Post* (1801), the *Journal of Commerce* (1827), and some others had been in existence for many years. But now the era of cheap newspapers was initiated. The *Sun* (1833) and *Herald* (1835) were started on this principle; the older journals in time conformed. The *Tribune* was founded in 1841, the *Times* in 1851, and *World* in 1860. The influence of this growth of the press upon the business of the metropolis of the country, needs no pointing out.

And now a word as to the progress of the firm during these thirty-five years, so full of significant events. Sharing with other merchants the disadvantages confronting trade at the close of the War of 1812, the firm of H. H. Schieffelin & Co., overcame them, continued its existence, and as more favorable conditions prevailed, increased its prosperity. The business now in the hands of the son Henry H., had outgrown the capacities of its original and historic home in Pearl street. It had been moved around the corner into Maiden Lane, a street which next to Broadway was among the oldest of those of New Amsterdam. But as prosperity and extension still attended the

H. Schieffelin retired from the house in which he had been a partner for forty-four years, and its head during thirty-five years. He was truly a remarkable man, who seemed to have a knowledge of every science and art, and was a living encyclopedia.

He was the first vice-president of the College of Pharmacy during 1829 and

New-York, June 1st, 1865.

I beg leave to inform you, that I have this day taken into co-partnership my son Henry H. Schieffelin, who by his prudence, attention and exertions, has merited confidence, and from which I have reason to expect much advantage and assistance.

My establishment in future be conducted under the firm of JACOB SCHIEFFELIN & SON, as per signature at foot. Permit me to request the favor of your continued confidence and friendship, and to assure you, that possessing ample means, there will be always added a sincere disposition to render you every possible service in the execution of your orders for Drugs and Medicines, upon terms the most liberal, and to fulfil every engagement with the strictest punctuality and honor.

I remain,

Your obedient humble servant,

Jacob Schieffelin

1830, before the College had a charter, and was made its President in 1831, in which year, the first charter of the College was granted by the Legislature.

Four of his sons, Samuel Bradhurst, Sidney Augustus, James Lawrence, and Bradhurst Schieffelin, now constituted the principal membership of the firm, which under the style of Schieffelin Brothers & Co. continued for a period of sixteen years.

elin had the chief direction of affairs, and to his energy and sagacity the increasing success of the firm was largely due. The improved methods and conveniences for intercourse which had so greatly affected every other line of business were taken advantage of by the firm and the effect was soon apparent. In 1853, Asher F. Randolph, and in 1855, John D. Dix became members of the firm. In 1854, removal was again necessitated by reason

of the growth of the business. It having been determined to erect a building which should afford ample accommodation, the structure still occupied, was built at 170 and 171 William, corner of Beekman street. It is of brick, six stories in height with basement and sub-cellar, and numerous fire proof vaults extending under the sidewalks in William and Beekman streets.

Upon removal to this edifice, a department exclusively for druggists' sundries, shop ware, etc., was organized. This seemed to be necessary, owing to the importance which this branch of the business had assumed. The subsequent growth of business in this direction had abundantly justified this step, which the firm was the first in the trade to take.

In 1859, William H. Schieffelin (the son of Samuel B. Schieffelin), William A.

purchase of a site beyond the Harlem River, upon which fireproof buildings of ample dimensions and most approved construction will soon be erected.

The pamphlet closes with a graceful tribute from the firm to the faithfulness of their employees. It is noted that a service of twenty-five years is not uncommon among their ranks, and the firm has at present in their employ ten persons whose period of service range from thirty to forty years, while one has accomplished the extraordinary term of forty-five years.

Medical Etiquette Among the Ancients.

In an old Latin poem, the manuscript of which has been found in the National Library at Paris, occur some interesting pages in which the author, whose name is unknown, explains the proper conduct of a physician.

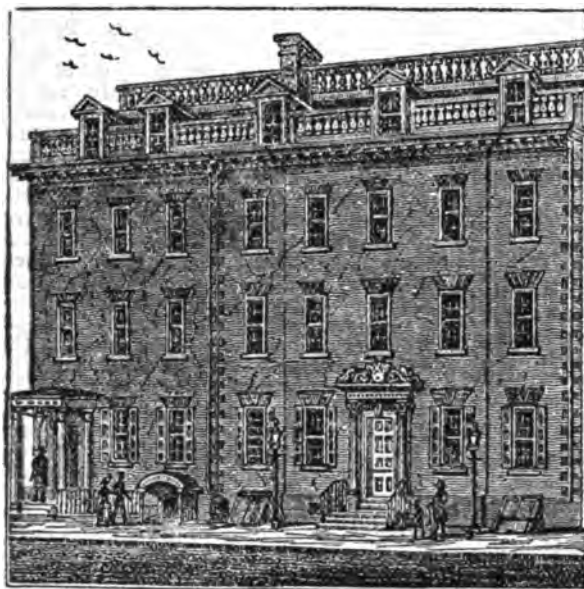
"On approaching the patient you should assume a calm expression and avoid any gesture of greed or vanity; greet those who salute you with an humble voice and sit down when they do. Then turning to the sick person, ask him how he is, and examine his pulse and his urine. To the patient you promise cure, but immediately on leaving the room you say to the relatives that the disease is grave. The result will be that if you cure him, your merit is greater and you will receive the greater praise and fee, while if he dies they will say that you had no hope from the first."

This counsel has been well followed by some physicians to the present day.

house ask you to the table conduct yourself in a seemly manner. Each time that a new dish is brought on do not fail to ask for the condition of the patient. This will give him great confidence in you, as he sees that in the midst of the variety of the repast you do not forget him. On leaving the table, return to the patient, and tell him that you have dined most excellently, and that everything was served to perfection. The sick person, who was anxious about these points, will rejoice at your words."

The Work of Dust.

Dust has a very large share in nearly all the phenomena of the earth's atmosphere. It is what makes the clear sky appear blue; and when we look up into the sky we see the dust in the atmosphere illuminated by the sun. There is nothing else before us that can permit the light to reach the eye. Light goes invisible, straight through all gases, whatever their chemical composition. The dust catches it, reflects it in every direction, and so causes the whole atmosphere to appear clear, in the same way that it makes the sunbeam visible in the darkened room. Without dust there would be no blue firmament. The sky would be as dark as or darker than we see it in the finest moonless nights. The glowing disk of the sun would stand immediately upon this dark background, and the same sharp contrast would prevail upon the illuminated surface of the earth—blinding light, where the sun's rays fall, and deep black shadows where they do not. Only the light of the moon and the stars, which would remain visible in the daytime, would be able to temper this contrast in a slight degree. The illumination of the earth's surface would be like that we see with the telescope on the lunar landscapes; for the moon has no atmospheric envelope that can hold floating dust. We then owe to dust the even moderately tempered daylight, adapted now to our eyes; and it is that which contributes



THE WALTON MANSION-HOUSE, PEARL STREET.

Gellatly and Joseph H. Westerfield were admitted into partnership.

An instance of the firm's enterprise was its intelligent seizure of the opportunities opened for new business by the discovery of petroleum in this country. An office was at once established at Titusville, Pa., and the firm was the first to bring petroleum into New York City as an article of commerce.

In 1865 the four Schieffelin brothers retired from active participation in the business of the firm, and the style became W. H. Schieffelin & Co., the partners being William H. Schieffelin, William A. Gellatly, Joseph H. Westerfield and William N. Clark. In 1880 William S. Mersereau and William L. Brower became partners, and in 1890 William Jay Schieffelin and Henry Schieffelin Clark were admitted into partnership. The history of the firm during this period is one which is familiar to the present generation of the drug trade. Much of the success of the firm has been due to the excellence of its chemical and pharmaceutical preparations, which has been attained through the extra attention given to such manufactures, and prominent among such means must be mentioned the extensive laboratory, fitted with all the apparatus and machinery necessary for efficient production, which was fitted up by the firm in 1882. The site of this laboratory has, however, within the present year, been dedicated to purposes of a public park, and this has necessitated the



PRESENT QUARTERS OF W. H. SCHIEFFELIN & CO. AT WILLIAM AND BEEKMAN STREETS.

The directions for table manners are equally amusing.

"When those who preside over the

much to the beauty of our landscape scenery.—Dr. P. Lenard, in *The Popular Science Monthly*.

The New Tariff and the Drug Trade.

The adoption of the Senate Tariff bill has been awaited with reasonable impatience by every class of business men. All industries are interested more or less in its provisions, and now that it has been passed by Congress and is in the hands of the president for signature, the opinion is freely expressed that business will receive an impetus which will go far to counteract the effect of the depression which has so long affected it. To a representative of the AMERICAN DRUGGIST, who set out to obtain the views of prominent representatives of importing and manufacturing houses, it was made plain that the adoption of the bill had caused genuine pleasure. As noted below all are agreed that an improvement in business must follow and many are quite jubilant over the prospect of higher prices.

W. H. SCHIEFFELIN & Co.—W. S. Mersereau is undisguisedly pleased with the bill and its adoption by the Senate. He said: "The passage of the bill has restored confidence, which is an important thing; dealers are no longer in the dark as to the articles affected, and the result should be a marked improvement in the business conditions. I anticipate an immediate revival of business in drugs and chemicals and a return to higher prices."

McKESSON & ROBBINS—John McKesson, Jr., says that business has already undergone a material improvement as a result of the adoption of the bill, and when it receives the Presidential signature and becomes law, it will operate still further to the improvement of the business condition. "Interior dealers," he said, "have for some time past pursued a policy of extreme caution with regard to purchases, showing no disposition to order in excess of immediate requirements; stocks are in consequence considerably depleted at interior points and it is now reasonable to expect a revival of speculation with the settlement of the uncertainty regarding tariff changes."

LEHN & FINK—Albert Plaut of the firm spoke hopefully of the likelihood of the bill becoming operative in a few days. He said: "Business has already taken on an improved tone in anticipation of the settlement of all the doubts which have disorganized commerce and manufactures during the past year. Now that the conditions under which the business world will have to operate, are known, affairs will be promptly adjusted, confidence restored, and I am confident an era of business prosperity will ensue. There will be some changes in the cost and values of drugs in consequence of the new bill, but these will not appear prominently at once, but gradually."

SEABURY & JOHNSON—Geo. J. Seabury, who is a pretty good diagnostician in matters political and commercial, gave it as his opinion that even if a general revival of business were to take place immediately its effects would probably not be felt until next year. "But," he said, "I do not anticipate any immediate revival of business and none will come until after the next election. When that is over we may experience a period of prosperity to counterbalance the past twelve months of business depression, but the new tariff arrangements will not be a factor in it."

Treasury experts declare the new tariff bill the most carelessly drawn measure that has ever been sent to their department. Errors abound on almost every page. Many of them are of no material importance, but others will require deci-

sions of the court to straighten them out.

The worst error in the entire bill is the failure to insert in section 2 the provision for the withdrawal from bond of the articles mentioned in that section under the provisions of the new bill. This error will put to great expense importers having articles in bond that have been put on the free list by this bill, for the reason that they will have to export their goods and reimport them in order to get them in free of duty. Secretary Carlisle concurs with the attorney general in the opinion that the provision for the withdrawal of goods from bond made in the first section did not apply to the goods mentioned in the second section, though it was undoubtedly the intention of Congress that it should so apply.

EFFECT ON CHEMICALS.

The chemical schedule, the first in the bill, is full of errors and doubtful provisions. Under the head of coal tar preparations in this schedule all coal tar colors or dyes not specially provided for in the act are made dutiable at the rate of twenty-five per cent. ad valorem. In the free list, paragraph 443 was intended to put on the free list crude coal tar and all products and preparations of coal tar except medicinal coal tar preparations and colors and dyes. By the omission of a comma, however, the paragraph is made to read so as to put nothing on the free list except crude coal tar, and the preparations which it was intended to make free will have to pay a duty of twenty per cent. ad valorem under the provision of the third section, which imposes that duty on all manufactured or partly manufactured articles not enumerated and provided for in the bill.

Paragraph 24 in the chemical schedule provides that magnesia, sulphate of, or Epsom salts, shall be dutiable at the rate of one-fifth of a cent a pound. Section 542 puts the same article on the free list. This will not give the Treasury officials much trouble, however, for it will be construed under the last sentence of section 4, which provides that if two or more rates of duty shall be applicable to any imported article it shall pay duty at the highest of such rates. Under this provision the duty imposed on Epsom salts in the chemical schedule will be assessed just the same as if it did not appear in the free list.

High Prices For Opium.

According to a story published in the daily papers, opium has been cornered and slaves of the drug will, in the future be able to gratify their craving for the insidious product of the far East only by paying very high prices. If any such corner exists it must be in smoking opium or "dope," as the opium used for smoking is called, is not handled by reputable drug houses. The trade in prepared opium is confined exclusively to the Chinese. This opium is entirely different from that which is used by physicians, and before it can be smoked it has to undergo a process known to the Chinese only. The Chinese get the opium in India, and "work it up" until it can be smoked. The Wo Kee Company in this city is the main distributing concern, but where the firm is or how it does business is one of those things that comparatively few New Yorkers know. It is safe to say, however, that as long as opium is craved in this city it can be had, but only by recognized opium fiends, and they may have to pay, for the present anyhow, an advanced price.

Chicago Prices.

Morrison, Plummer & Co. in their circular, Aug. 7, refer to the strikes, which, during the month of July interfered with commerce to a great extent. The tariff question is believed to be nearing settlement, which settlement would remove a great burden from business interests. The war between China and Japan is attracting attention to the products of those countries. Fluctuations in the drug market are alluded to in the following terms: Acetanilid, slightly lower. Acid, Carbolic and Citric, are easier. Salicylic, the real cause of the recent decline in this article is said to be in the shading of the syndicate prices by the outside makers. Alcohol was advanced 4c. gal. on the 5th ult. and a like amount on the 13th. [Independent producers have advanced the price of alcohol to \$2.27 @ \$2.28 since the publication of M., P. & Co.'s circular. Ed.] Alum is easier at \$2.05 in bbls. Balsam Fir, Canada, declined to 45c. Bismuth, another decline in preparations of bismuth took place early in July, affecting the entire list. Caffeine is scarce and somewhat higher. Camphor remained at figures quoted July 8rd, until within a few days, when news of advance in Japan, coupled with possible shortness of supply, caused an advance of 2 to 8c. lb., and manufacturers predict further advance in the near future. Chamomiles, German, of new crop are now in market, and on account of abundance of supply, prices are lower. Cocaine, Muriate, was advanced 75c. oz. on the 16th ult. Cuttle bone is lower. Select trieste 18c. lb. in 10 lb. lots. Epsom salts in barrels is selling at 1 3/4c. lb. Ethers and alcoholic preparations in general are higher. Oils, essential. The only notable change is in peppermint. The arrival of the new crop caused a drop in prices. Heavy lard, extra, is a trifle firmer at 52c. Opium, sold down to \$2.10 for a few days, but is now firmer at \$2.25 owing to unfavorable advices from abroad. Large parcels cannot be bought as favorably as smaller ones. Quinine has taken an upward turn. Outside stocks are being depleted and more concentrated, and manufacturers are apt to advance their figures. Roots, senega and serpentaria, are lower with the advent of the new crop. Seeds, canary, owing to unfavorable reports from the growing districts is much firmer. Celery is lower, and promises a further decline on the arrival of the new crop. Hemp is firm and tends upward. Turpentine declined to 85 1/2 on the 2nd inst.

The Position of Quinine and Its Raw Material.

The Roessler & Hasslacher Chemical Company, manufacturing and importing chemists, 73 Pine street, New York, under date of August 14, issue a circular to the trade upon the subject of quinine and cinchona bark. An interesting retrospect of the situation of the alkaloid and its raw material is given as follows:

Three distinct periods marked by the flood of over production in Southern America, Ceylon and Java, have brought the queen of drugs down to the low level reached not many months back, when even the best-informed asked themselves whether the bottom had really been touched: so altogether unhealthy appeared the relation between supply and demand, and so incalculable the final outcome.

In the early eighties, the discovery of vast native cinchona (Cuprea) forests in South America, the unheard of rapidity with which plantations in Ceylon were pushed forward, and the simultaneous development of Java cultivations of high grade bark, all these factors necessitated the permanent downward movement of quinine prices.

As long as bark was thrown on the market indiscriminately, the reckless, though in Ceylon not altogether voluntary, policy of the planter and shipper was bound to end disastrously. South America was first to feel the effects of the depression. The expense of gathering and transporting the barks there to the coast was so high that these barks soon became unremunerative.

In Ceylon, as stated, the increase of exports was not altogether a matter of free decision with the planter. After the terrible losses which the island had suffered through the destruction of vast areas of coffee estates, the rapidly growing conviction that cinchona had been "overdone," finding a formidable rival in the vastly richer Java bark—the attention of cultivators had been directed to a new staple, tea, to which they forthwith devoted all their energies and hopes. Both to get ready money and to make room for the new cultivation, a stripping and uprooting of cinchona trees was inaugurated, which in 1886 led to the enormous export of more than fifteen million pounds. No doubt a large amount was branch and low grade bark; but the total quantity had its effect on the world's market.

It is true that after that "banner year" Ceylon exports continued to decrease until they dwindled down to three and a-half million pounds in 1893.

But in the meantime Java had appeared on the Amsterdam market with ever increasing amounts, the more important as their average percentage of quinine was at least twice that of Ceylon bark. The results in prices obtained were corresponding, and the unit in Amsterdam went as low as 3½ cents just a year ago. The Java cultivators, as the decisive factor in the world's market, however, have since recognized that, in spite of higher class bark, with other points equal, they were following the same road of self-destruction as their Ceylon neighbors before them. With Ceylon exports and London stocks (from 47,000 in 1872 to 37,000 packages in 1893) heavily decreased, the simultaneous reaction in Amsterdam could not help bettering affairs materially.

While Java had shipped, in 1893, 8,000,000 pounds, there only reached Amsterdam, during 1894, 7,100,000 pounds. From January 1st to July 1st, 1894, the Amsterdam stocks decreased fully 2,500 packages. During June, 1893, there had been shipped from Java 800,000, and in June, 1894, only 400,000 pounds. The tangible result was a gradual advance of the unit obtained in the Amsterdam sales, until 4.50 cents per unit were reached in the last auction, equal to an advance of 10 per cent. over the previous, and 80 per cent. over the lowest one.

The bark offerings of last year obviously have not exceeded the demand, and the strengthened position of quinine is the outgrowth of natural and healthy conditions.

Package Prices.

The price current issued by William H. Raser, drug broker and commission merchant, 32 Platt street, New York, under date of August 8, remarks that business in a jobbing way is very fair, but large trading is not being indulged in to any great extent. Opium is decidedly firmer in this market, as there is more demand springing up and while a few cases are yet to be had @ \$2.10, most holders are now asking \$2.15 and up to \$2.20 for jobbing parcels, but \$2.12½ to \$2.15 will yet buy. Pure powdered opium \$2.75 to \$2.80 and more is now asked. Quinine, there is nothing of particular interest transpiring; prices are firm and some brands of German bulk can be had @ 24 cents, but 24½c. generally asked for preferred brands. One lot of solid goods (some thousands of ounces) it is said could be secured for 28½c. cash. Camphor manufacturers have advanced prices 2c. per pound, owing to the China-Japan troubles. Japan camphor is also held higher. Balsam copaiba firmer. Balsam in Canada, the extremely low figures named several weeks since are not now talked about and stiffer figures are being named though no material or positive advance has taken place. Angostura Tonka Beans, new crop arrivals have sold at a very low price in a large way, but for prime old beans full prices are demanded. Gums, Arabic are tending higher. Oils, Anise and Cassia are firmer with a higher tendency as are most Chinese goods. Shellacs not materially changed, but dull and easy. Castor Fiber arriving more freely and lower prices prevail, ranging from \$12.00 to \$14.00 and \$15.00 between sellers and buyers. Sarsaparilla, Mexican is lower @ 8½c.

for single bales, lots of 5 or 10 bales could probably be secured @ 8 or 8½c. Acid, Oxalic is firmer. Chlorate Potash, easier. Saffron, American is tending higher, through bearish influences are talking prices down, but not selling. Coriander seed declining, 5½ and 6c. is now named. Celery Seed, unchanged, 12 and 18 asked as to quantity, but probably will be lower when new crop arrives. Canary and Hemp Seeds, fair demand, prices unchanged. While writing we hear that still higher prices are being asked for opium, the pretensions of some holders being \$2.20 for cases now. Spices, Saigne Cassia, tending higher. Black Pepper, firmer. Cloves, Gingers, Mace, Nutmegs and other Spices unchanged.

Wholesale Druggists' Prices.

Our "Prices Current," representing the prices at which retailers purchase goods in ordinary quantities is, as usual, given elsewhere in this issue. For the convenience of the trade we refer in the following paragraphs to the more important of the changes which have taken place since our last issue, with comments on other lines in which special features are to be noted:

ACETALINID has declined.

ALCOHOL has advanced materially, as a result of the increased tax upon alcohol. We quote the range at \$2.50 @ \$2.60 and \$2.70 @ \$2.80, the latter for cologne spirits.

BORIC ACID is lower at 18c. @ 22c. for crystals.

BALSAM COPAIBA is 5c. lower.

CACAO BUTTER is higher at 42c. @ 50c.

CALOMEL has declined to 75c. @ 85c.

CAMPHOR has advanced as a result of the restrictions to traffic incident to the war in China. We quote the range at 45c. @ 50c.

CAPSICUM has declined 5c. for both whole and powdered.

CASTOR FIBER is weak and values for powdered have declined to \$1.50 @ \$2.

CIVETTE is scarce and high.

COCHINEAL is firmer and now quoted 35c. @ 40c.

DERMATOL is lower.

DOVER'S POWDER is firmer and quoted \$1.20 @ \$1.30.

ARNICA FLOWERS are easier at 15c. @ 18c.

GUMS.—Benzoin is marked down to 45c. @ 50c. Guaiac, and gamboge have each declined 5c. from previous prices. Opium is higher at \$2.25 @ \$2.35 and powdered \$3.25 @ \$3.40.

LUNAR CAUSTIC has declined.

MACE is offering at 10c. less than previous quotation.

MENTHOL is higher at 50c. @ 55c. per ounce.

METHYLENE BICHLORIDE is now quoted 65c. @ 75c.

OILS.—Clove is weaker and quoted 70c. @ 80c. Neroli, Bigarade has declined to \$2.75 @ \$3.25; petale is also lower at \$3. @ \$3.25. Olive, Malaga, is less firm and 10c. lower. Orange, sweet, has declined to \$1.60 @ \$1.75. Peppermint of all grades is cheaper.

SAFFRON.—Spanish, is materially lower with the current quotations \$5.50 @ \$7.50.

SEEDS.—Coriander is higher. Ground flax is quoted 3½c. @ 5c. Larkspur has advanced to \$1.50 @ \$1.75.

Review of the Wholesale Market.

NEW YORK, August 24, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

There has been a notable increase of activity in the market for drugs, dyestuffs and chemicals in the interval since our last report. While this is in part due to the opening up of Fall trade, the adoption of the new tariff bill by the Senate has had the effect of stimulating interest. The hand to mouth policy which has characterized the operations of interior dealers for some time past has resulted in a general depletion of stocks; but a better inquiry is now developing and orders for the various lines are coming to hand with somewhat greater freedom, the interest displayed encouraging dealers in the hope that as the month advances a more liberal disposition will be manifested by the buyers of the country. Though we have few changes of an upward character to report, the market exhibits a good deal of strength and holders are maintaining prices steadily. Opium continues dull and unsettled. Quinine is firm and expected to advance. Camphor is firm at the advance. Oil Anise has advanced. Alcoholic preparations have advanced in the face of the uncertainty which exists with regard to the final settlement of the tariff matter. The raw material has advanced since our last report.

ADVANCED.

Alcohol.
Camphor.
Caffeine.
Oil Anise.
Canary Seed
American Saffron.

DECLINED.

Celery Seed.
Fennel Seed.
Foenegreek Seed.
Chlorate of Potash.
Coriander Seed.

DRUGS.

ALCOHOL has marked a further advance since the appearance of our last report, and is now quoted \$2.29 @ \$2.31 net. Outside competitors are quoting \$2.27 @ \$2.29 net and occasionally business is done at \$2.26.

ARNICA FLOWERS are meeting with fair steady inquiry, though most buyers are awaiting the arrival of new crop, which promises to be abundant. Flowers to arrive are offered at 8c. with the tendency toward lower figures.

BALSAM COPAIBA is meeting with a fair amount of inquiry at the range of 34c. @ 36c. for clean Central American.

BALSAM FIR, Canada, is offered in barrels at \$3.40. Values are tending higher and cases are now held at \$3.50 and upwards.

BALSAM PERU and TOLU have remained quiet at unchanged prices.

BUCHU LEAVES, short, are jobbing actively and at well sustained prices, say 7c. @ 10c. as to quality. Long are about out of market.

CACAO BUTTER is firmer at 32½c. @ 33c. Among other transactions we note sales of 4,000 lbs. Dutch at 32½c. cash, and 4,000 lbs. English at 31½c.

CANTHARIDES are in demand for consumptive purposes, and values are hardening for Chinese, owing to the commercial restrictions incident to the Chinese-Japanese war.

CAFFEINE has marked a material advance in the interval, and \$3.25 is quoted for large bulk lots. Small orders can be executed on the basis of \$3 @ \$3.10.

CASSIA BUDS have been active in a jobbing way, with the current sales at 18c.

CHAMOMILE FLOWERS, new crop, are meeting with considerable inquiry, and numerous sales for forward delivery are reported. German on spot is quoted 12½ @ 20c., as to quality, and Roman tends to 15c.

CUBE BERRIES continue dull, with prices nominal. Prime held at 15 @ 16c., and common to ordinary at 12 @ 18c.

COD LIVER OIL will cost less to import under the new tariff, but values in this market continue steady and firm, as a result of strong advices from primary sources; sales of 25 bbls. at \$27 and 10 bbls. at \$25 are noted among other transactions.

COLOCYNTH APPLES, Trieste, are scarce, and 80c. is now generally quoted as inside. Spanish at 18 @ 20c. is neglected.

CERECINE, yellow, has been inquired for, with numerous small sales at the range of 9½ @ 11c. for numbers one and two respectively. White is quoted 12c.

ERGOT, new crop, offers at 18 @ 20c. for German, but important interest is yet lacking.

MENTHOL is generally held at \$5.75, though in exceptional instances \$5.65 is quoted as acceptable.

OPIUM is without improvement. Buyers and holders are still apart in their ideas, the former waiting for the latter to seek them on a lower basis of values; but holders are apparently disinclined to urge sales at a concession from present values. Prices have undergone no material variation since our last report, single cases being yet obtainable at \$2.10 with the range for jobbing quantities \$2.10 @ \$2.15; powdered is held at \$2.70 @ \$2.85 as to holder, quantity and test.

QUININE is sustained in steady position and though no advance in prices has yet been quoted by the agents of the foreign manufacturers, values are tending steadily upward and higher prices are confidently anticipated. 25c. is now quoted steady for foreign. Cables from London report an advance equivalent to 2c. which would make the price here 27c., but sales are making at 25c.

SAFFRON, American, is firmer with 25c. quoted inside for single bales, and 26c. the general quotation.

SENNA LEAVES, Alexandria, continue in good jobbing demand; of siftings we are reported a sale of 5,000 lbs. on private terms; quoted 5½ @ 7c. as to quality.

PALMETTO BERRIES, raw, have sold recently in small lots at 7c.

SOAP, Conti's white, is steady at 9½ @ 9¾c., the latter for jobbing quantities.

TONKA BEANS, Angostura, new crop, have sold freely during the interval at \$1.80 @ \$1.50. Prime old are jobbing at \$1.95 @ \$2.00.

WAX, Brazil, is steady at 18c., 16c. and 14c. for numbers 1, 2, and 3 respectively. Japan is offered at 6¾c. @ 6¾c.

DYESTUFFS.

CUTCH meets with a steady moderate inquiry and the market is sustained at the point of 5½c. @ 6c. for prime bale, and 6c. @ 7c. for prime box.

DIVI DIVI offers at 55c. @ 65c. as to quality though the demand is very limited.

GAMBIER is in fair jobbing demand and firm at 4¼c. @ 4¼c. for sail goods. Lots from store command 4¼c. @ 4¼c. and nothing is offered to arrive on the way less than 4¼c.

INDIGO is quiet at nominally unchanged prices.

NUTGALLS, Blue Aleppo, are jobbing slowly within the range of previous prices, with however a firmer tendency notable, 18¼c. @ 14c. representing the range of recent sales.

SUMAC continues quiet, the recent concessions not stimulating action. Sicily is in moderate demand with the range at \$62.50 @ \$70 as to brand and quality.

CHEMICALS.

ACETIC ACID has been somewhat unsettled owing to general competition and the absence of a combination among makers. We are reported numerous sales within the range of \$1.45 @ \$1.60.

ALUM continues selling fairly at the previous range of \$1.70 @ \$1.75 for lump and \$1.80 @ \$1.85 for ground.

ARSENIC, white, is without important change. Small sales are reported at 8¾c. @ 8¾c. as to brand.

BRIMSTONE best seconds offers to arrive at \$16 @ \$16.50, though important demand is lacking.

BLUE VITRIOL is quiet, though there is seemingly no pressure to realize below 8¾c.

CARBOLIC ACID in pound bottles, is scarce and prices are firm, with 19c. asked in some instances.

CAUSTIC SODA appears to be meeting with increased inquiry for forward delivery, and the tone of the market is firmer.

CHLORATE OF POTASH continues dull with crystals offered at 12c. @ 12¼c. and powder 12¼c.

BLEACHING POWDER is less actively inquired for but prices are maintained with a fair share of firmness at \$1.75 @ \$1.85.

CREAM TARTAR remains quiet but steady at 17¼c. @ 17¼c. for powdered.

CITRIC ACID continues in moderate demand and firm at 40c. for barrels and 40¼c. for kegs.

NITRATE OF SODA is firmly sustained at \$2.20 @ \$2.25 in jobbing quantities.

QUICKSILVER is firmer in sympathy with the London market, though prices are nominally unchanged.

SULPHURIC ETHER has been advanced 3c. per per pound, making the quotation 59c. for U. S. B., 65c. for washed and 66c. for concentrated.

TARTARIC ACID remains quiet but steady at 22c. @ 22¼c. for powdered.

ESSENTIAL OILS.

ANISE has been marked up 10c. in anticipation of interruption of shipments from the Chinese-Japanese difficulties. The stock here is light and a rather brisk demand has also had its influence in sending up prices.

CASSIA continues quiet but firm at 80c. @ 85c.

CUBE B has declined to \$1.25 @ \$1.35, without, however, appreciably increasing the demand.

CLOVE continues quiet at the previous range of say 50c. @ 50¼c.

LEMON and ORANGE have ruled quiet during the interval, but prices are well sustained at the previous range.

PEPPERMINT is a trifle unsettled and easy, with fine Western offered in instances as low as \$1.80, and the nominal quotation \$1.90. Wayne County offers at \$3 and H. G. H. at \$2.50, but we learn of no important transactions at these figures.

GUMS.

ALOE, Curacao, has sold freely during the interval on private terms. The jobbing price is 8¼c. @ 8¼c. for boxes.

ARABIC is firmer, in sympathy with reports from primary sources, and the market is steady upon the basis of 12c. @ 18c. for sorts.

CAMPOR has advanced in the interval, and barrels are now quoted at 42c. and cases 43c.

CHICLE continues held at 24¼c. @ 25c., though only small parcels are reported as having changed hands.

KINO is very scarce, and quotations are entirely nominal.

SHELLAC continues in fair moderate inquiries for consumption at the quoted range.

ROOTS.

ACONITE is without special feature either as regards price or demand.

ALKANET is developing a firmer tone and is meeting with fair inquiry at the quoted range of 5¼c. @ 6c.

CALAMUS is held and jobbing fairly at 6¼c. @ 7c.

DANDELION, German, is well sustained with 7¼c. @ 8c., with jobbing sales at this range.

GOLDEN SEAL offers in limited quantities from some holders at 19c., though most holders are quoting a higher figure. We quote the range at 19¼c. @ 20c.

IPECAC remains quiet at 95c. @ \$1.05, which is a slight reduction from the previous range.

JALAP is maintained at 22c. @ 24c. and the indications are favorable for a still further improvement.

SARAPARILLA, Mexican, remains quiet notwithstanding present low prices. Jobbing lots are offering at 8¼c.

SENEGA is generally held at 29c. as an inside price. Holders are, however, manifesting no urgency to realize.

SEEDS.

ANISE, star, has improved in demand since the outbreak of the war in the East, but holders are indifferent sellers upon the basis, of, say, 18¼c. @ 19c.

CANARY, Dutch, is in limited inquiry at the range of 6¼c. Smyrna is firmer at 8¼c., while Sicily is held at 8¼c.

CELERY is in moderate demand, and realizing 12c. @ 12¼c., a slight decline from previous values.

CORIANDER has receded in value, with 5c. @ 5¼c. quoted for unbleached and bleached respectively; there is a fair jobbing demand for both grades.

FENNEL, new crop, German, is in better supply and offering freely for forward delivery. We quote the revised ranges at 8¼c. @ 9c.

FENUGREEK is easier, with sellers quoting 2½c. @ 2¾c.

MILLET is in better position, with 1¼c. @ 1½c. quoted steady.

MUSTARD, California, yellow, is firm at 4c.; brown is held at 8¼c.

POPPY is offered more freely, with 5c. quoted as acceptable.

RAPE, German, is a shade easier, with sellers at 2¼c.

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THE ASHEVILLE MEETING OF THE A. P. A.

NOW that the American Pharmaceutical Association has met, the members have delivered themselves of their various papers and speeches and have scattered again, it remains to consider the result of the meeting. These results may be considered collectively under four heads as Scientific, Educational and Legislative, Commercial and Social.

* * * *

The diverse interests and the varied lines embraced under the general term "pharmaceutical" brings together in the association many men of many minds. The practical pharmacist when spoken to in relation to joining the association frequently replies that he has no place in an organization of college professors. The almost total absence of practical papers among those submitted in the scientific section this year gives some grounds for the inference that the association is not one of practical pharmacists. The premises, however, are not sufficiently ample to draw any general deductions. The interesting and far-reaching discussions of one or two of the papers took a practical and valuable direction.

One of the papers, that by HENRY KRAEMER on an examination of cloves, contains one suggestion that promises much in the direction of aid towards the valuation of powdered medicinal drugs, at least in so far as admixture with other powders is concerned. To carry out Mr. Kraemer's process for examination of powders will not require a high degree of general efficiency as a microscopist but merely special practice along a particular line so as to develop expertness in that special field. An abstract of this portion of the paper will appear in a later issue.

Dr. ECCLES' paper on Pharmaceutical Bacteriology, like everything that emanates from his gifted pen is most

interestingly written and suggests a promising field for study.

Oil of cloves received a great deal of attention, several exhaustive papers having been devoted to this subject. Professor FENNELL in particular wrote at great length on the subject.

In higher chemistry the record of the meeting is excellent. The paper on Hydrocymenes and Derivatives, from the pen of Professor EDWARD KREMERS, is a profound and exhaustive study of a subject to which the author has paid especial attention, this being his third contribution to the association on menthol and the substances derived therefrom.

A further study of the uses of the refractometer, from the pen of W. F. EDWARDS, of Ann Arbor, supplements a valuable paper on the same subject, contributed to the association a year since.

The Analytical Companion to the Pharmacopœia, contributed by J. B. NAGLEVOORT, is a "magnum opus," both in bulk and in value, while his scheme for the detection of morphine, and codeine, using isobutylic alcohol as a solvent instead of amyl alcohol, promises to be of great practical value. As he remarks in his introduction: "There is a moral duty to perform. It is a daily occurrence that we have a suspicion of the presence of morphine in patent medicines of different character, and a general sentiment imposes an obligation upon every one who is under favorable conditions and has the resources and the disposition for 'work' to let the community have the benefit of it." The process is sufficiently simple to be carried out in any well-equipped pharmacy, and it is to be hoped will be frequently utilized.

Following is a list of the papers presented:

(1) "Advance sheets of an Analytical Companion to the U. S. Pharmacopœia," and (2) "Testing for Arsenic of the U. S. P.," by J. B. Nagelvoort; (3) "Grain Weight.—A study of Wheat," by J. U. Lloyd; (4) "Oil of Cloves," by C. T. P. Fennell; (5) "Examination of Kola," by C. O. Topping; (6) "Reduced Iron," by G. C. Steventon; (7) "White Castile Soaps," by Samuel R. Knox; (8) "Glycerin of the Market," by J. L. Tegarden; (9) "Experimental Work on the Solvent Power of Alcoholic Menstrua," by L. D. Haverhill; (10) "A Microscopical Study of Cicutia

Maculata," by F. Lyle Robertson; (11) "Quantitative Determinations by the Refractometer," by W. F. Edwards; (12) "On Hydrastinine and Berberine," by Alfred R. L. Dohme; (13) "Saw Palmetto," by J. Marion Dixon; (14) "Pharmaceutical Uses of Acetone" and (15) "The Solubility of Canada Balsam in Alcohol," by J. E. Morrison; (16) "Alkaloidal Chemistry," by Lyman F. Kebler; (17) "Notes on the behavior of Ferratin and Albuminate of Iron with Artificial Gastric Juice," by J. O. Schlotterbeck and S. R. Royce; (18) "Methods of Testing Pepsin," by E. H. Bartley; (19) "North Carolina Medicinal Plants of Commercial Value," by Wm. Simpson; (20) "Saw Palmetto," by C. C. Gherrard; (21) "Venus Fly Trap," by Jas. D. Nutt; (22) "Relative Value of Two Kinds of Ipecac Root," by Alfred L. Dohme; (23) "The Use of Isobutylic Alcohol in the Detection of Morphine and Codeine," by J. B. Nagelvoort; (24) "A Critique upon Criticisms of the National Formulary," by Luther F. Stevens; (25) "Examination of Preparations of Cod Liver Oil for Alkaloids of Cod Liver Oil," by J. O. Schlotterbeck; (26) "Therapeutic Value of so-called Elegant Preparations of Cod Liver Oil," by F. E. Stewart; (27) "On Powdered Extracts," by C. S. N. Hallberg; (28) "Pharmaceutical Bacteriology," by R. G. Eccles; (29) "The Opium Poppy in North Carolina," by Gerald McCarthy, Botanist Exp. Agricultural Station; (30) "Rhus Toxicodendron," by H. M. Whelpley; (31) "Laboratory Notes," by E. L. Patch; (32) "Official Process for Spirit Nitrous Ether," by Chas. M. Ford; (33) "Elegant Preparations of Cod Liver Oil," by Henry A. Stearns; (34) "Further Notes on Taraxacum Root," by L. E. Sayre; (35) "Improved Working Formula, No. 27 National Formulary," by Samuel C. Davis; (36) "Alligation in Pharmaceutical Calculations," by T. D. Reed; (37) "Additional Experiments with Datura Stramonium," by Alfred R. L. Dohme; (38) "Hydrocymenes and Derivatives," by Edward Kremers; (39) "Oil of Cloves," by C. P. T. Fennell; (40) "Microscopical and Chemical Examination of Cloves," by Henry Kraemer; (41) "What is the Quality of Reduced Iron Dispensed by Pharmacists?" by Alfred R. L. Dohme; (42) "A Method for the Estimation of Mono and Bicarbonate of Sodium," by W. T. Wenzell; (43) "Pharmaceutical Bacteriology," by R. G. Eccles.

* * * *

EDUCATIONAL AND LEGISLATIVE

OUR educational institutions are as yet unsettled as regards curriculum, qualifications, etc. This is of course true in a measure of all educational institutions since a constant change of curriculum is required that the latest advances of science may be kept pace with. The feeling of uncertainty is, however, particularly strong in pharmaceutical schools. There is here a division of sentiment, particularly on the question of the necessity of practical experience as a prerequisite to the granting of a degree. There is undoubtedly room for an honest difference of opinion on this head though it would seem desirable that a difference in the degree granted be maintained in order that the significance to the public of the degree graduate in pharmacy,—if it has any significance—be maintained unchanged. Around this point is being waged a war of words that made the proceedings of this section very interesting indeed.

The legislative department of this section indulged in papers, vaguely speculative for the most part or purely theoretical, in which the writer after premising that he had never been examined by a board of pharmacy, was not connected with a board, never was and never expected to be, proceeded to give some sound *practical* advice as to what board examinations should consist of.

Mr. WHITNEY, of the Massachusetts Board gave some interesting data as to

his experience with college graduates, showing that college diplomas do not always mean much, and he also had a few words to say concerning the publication of board questions in pharmaceutical journals. His arguments against this are briefly that the board is not an educational institution, and that the particular set of questions published becomes practically useless to the board as a set. It has also been argued, though not by Mr. Whitney, that other boards can, by copying such published questions, avail themselves of the fruits of another's labor.

This latter argument scarcely merits controversy. If by chance any board of pharmacy should be too incompetent or too indolent to prepare its own questions, there are an ample number of quiz compends from which it can supply its needs without recourse to the questions of another board.

The statement that the Board is not an educational institution *per se* is admitted to be true, but in actual practice Mr. WHITNEY admits that it incidentally becomes a factor in the education of the candidates who appear before it. Nor is this objectionable so long as this is merely incidental to the work of the board. It is also admitted that a set of questions once published becomes useless, as a set.

Really the only question to be considered by the board is this: Does the occasional publication of a set of questions serve as a general guide to the amount of information required, and thus prevent incompetent persons from wasting their own time and that of the board by appearing for examination where they cannot possibly pass? We unhesitatingly answer this question in the affirmative and feel confident that where this policy has been carried out the proportion of rejected candidates will be lower (all other conditions being equal) than where it is not carried out. Let the boards take example of the government departmental examinations. In many of these, particularly where the examination is open to the public the examining board will, on request, furnish specimens of the questions as a guide to the character of the examination to be undergone. This is done of course not to aid the applicant in passing but merely to serve as a guide to the character of the examinations so that the candidate may determine for himself whether there is a chance of his passing and it is upon this ground, and this ground only, that the board should occasionally publish a set of its questions. It will result in an economy of the time of the board.

THE Interstate Druggist League was commended, as it should be, by the commercial section, but it is to be regretted that the reports from the West were so gloomy. The confidence of the Eastern members is happily unshaken, and it is to be hoped that this confidence will not prove misplaced.

The position of the drug trade on the alcohol tariff is rather anomalous. After praying for tax-free alcohol for years, we find, when we are within a possibility of obtaining it, that it is apt to prove a stork king among the frogs. The discussions on this subject make interesting reading, and it would seem to be the general sentiment that, all things considered, pharmacy would be better off without, than with tax-free alcohol, save for manufactures in which the identity of the alcohol is lost.

Theoretically, free alcohol is very desirable, but the practical difficulty is that the treasury department will adopt such regulations as will throw all the advantages of tax-free alcohol into the hands of the large manufacturers.

* * * *

SOCIAL.

THE social life of the meetings is always at its flood in the summer resort and at its ebb in the large city. Being under one roof, and having few distractions to lure individuals or small parties away, there is a more general and hearty participation in the social programme laid out; the members are thrown together more in the summer resort than in the city. And the value of the social features of these meetings should not be underrated. The meeting is for many their sole annual recreation, and if the social features are neglected many who now hesitate, but still choose the Association instead of the watering place, will give the latter the preference. So long as the social features of the meeting are so well looked after, as they have been in the White mountains and at Asheville, each succeeding meeting will prove more enjoyable.

A NEW HANDBOOK OF PHARMACY.

I.

WE had the privilege recently of looking over the advance proof sheets of Professor COBLENTZ's new "Handbook of Pharmacy," a work which will shortly be issued by a well-known Philadelphia publishing firm.

Professor COBLENTZ's succeeded the late lamented Prof. P. W. BEDFORD in the chair of Theory and Practice of Pharmacy at the College of Pharmacy of the City of New York, a connection

which he still retains besides being director of the Pharmaceutical Laboratory of that institution. His teachings are therefore in a sense authoritative and his new "Handbook" should command the careful attention of all whose duty it is to consult reference books of this character.

Most interest in the forthcoming work will probably be manifested by experienced pharmacists who will be curious to mark the progress which pharmacy has made since their own salad-days,—so much being said nowadays of the superiority of modern methods over those of, say, 50 years ago.

The introductory pages are taken up with an historical study of the origin and development of national pharmacopœias, and the style of nomenclature followed in the various works is briefly touched upon.

The nomenclature of the U. S. Pharmacopœia is explained in detail, paragraphs being given up to definitions of the "Official Latin Title," the "English Title," "Symbolic Formula and Molecular Weight," "The Synonym," "The Pharmacopœia Definition," etc.

The opening chapters are remarkably rich in illustrations, apparently no article or apparatus used in the weighing and measuring of solids and liquids having been omitted, and the young student into whose hands the work will fall cannot fail to be impressed with its wealth in this particular, however much the severely practical character of the text may daunt him.

Chapter I deals with weights and measures, the whole subject of metrology being fully expounded by means of illustrations and references in the text. Some new designs in dropping bottles are figured, and the proper position of the stopper for dropping from an ordinary bottle is illustrated. The terse and clear definitions of the terms used in the metric system will be much appreciated by students. In his efforts to make the subject clear to the minds of beginners, Professor COBLENTZ has, however, barely escaped the sin of tiresome repetition; but the student will, doubtless, be the gainer by any tendency in this direction.

The theory and practice of ascertaining the specific gravity or density of different bodies is most exhaustively treated of in Chapter II, and numerous illustrations of pycnometers, densimeters, and specific gravity tubes and bottles are given.

Heat and its various applications in pharmacy are discussed in Chapter III, some of the latest examples of improved burners being described and illustrated.

The measuring of heat and the determination of melting and boiling points are also explained at length. This is followed by a chapter on the applications of heat in various pharmaceutical operations. Illustrations of the blowpipe and its flame are given, but its application in pharmacy being limited the subject is dismissed with a few words.

The use of the crucible in carrying on the process of ignition or smelting receives mention and the different forms of crucibles employed are figured in the text. Simple examples are included. Vaporization is accorded a little over thirteen pages and some twenty-eight illustrations of the different apparatus employed in the various operations of evaporation, distillation, sublimation, dessication and exiccation are given. The cut and descriptive matter relating to a "Vacuum Apparatus" on page 76, will furnish to the young student a ready means of grasping the intricacies of that simple but little comprehended operation of concentrating extracts in vacuo.

Some of the chapters in Dr. COBLENTZ's new book seem little more than a collection of pictures and might easily be mistaken for pages from the illustrated price list of a dealer in chemical wares. In the chapter on distillation alone he employs 43 figures to illustrate about five pages of reading matter; this is not a feature to be despised, however, as many of the illustrations are very necessary features of a work of the kind under review.

Hints regarding the storage and preservation of powdered and vegetable drugs are given in the chapter on dessication. This chapter contains numerous illustrations of drying ovens, dessicators and wash bottles.

The various methods of reducing drugs to powder are studied in the chapter headed "Comminution," and this usually dull subject seems to take on a new aspect from the variety of pictures shown.

ADULTERATION OF ESSENTIAL OILS.

UNITED STATES Consul CAUGHY of Messina, Italy, has sent a supplementary report to the Department of State on the adulteration of Italian essential oils. French turpentine is, it seems, largely employed as an adulterant, and efforts are being made in the Italian Chamber of Deputies to have a prohibitory duty placed upon the article. Considerable depression prevails in Sicily at present and Signori BOSELLI and FALOI, members of the Chamber,

claim that the use made of French turpentine as an adulterant of essential oils is the chief cause. The adulterant, it is contended, takes the place of just so much essence, and each pound of turpentine used deprives the Sicilian peasant of the sale of 1,000 of the fruit.

The man who is shrewd enough to foist upon his customers adulterated goods is, according to Consul CAUGHY, equally shrewd in covering his tracks, and he takes care not to import the turpentine in his own name. Very little French turpentine is imported directly into Messina, the greater portion entering Italy at Genoa in small lots consigned to different individuals. The duty paid there, it immediately takes the name of olive oil for machinery purposes, or some other fluid, and is shipped to Messina, but not addressed to the manufacturer of essences. Upon three barrels imported recently, for instance, the addressee was the porter of one of the largest essence exporters in the city. There is but one firm in Messina that is known to deal in turpentine, "*citronina canforina*," and other adulterants. But while many of the shippers here undoubtedly adulterate, to a greater or less degree, all the manipulation, it is claimed, does not occur in Messina. If the walls of the cellars of some of the importers in the United States (say the shippers) could talk, they would tell a marvelous tale.

Consul CAUGHY speaks of a gentleman who ships as pure essence as leaves Messina, who avers that a New York importer, who buys thousands of coppers from him every year, advertises and sells essence at a lower figure than he pays for it. There is but one solution to this mystery, and that is that for every copper of pure essence two of adulterated are bought. The Consul asked this gentleman why he did not protest, and his reply was that he could not afford to lose a good customer.

Such practices can be stopped by several methods, one of which is for the druggists, etc., to refuse to buy except upon analysis, and to see that the seal of the Messina chemist is intact.

Consul CAUGHY's investigations have convinced him of the worthlessness of the polariscope (or polarimeter) as a means of determining the purity of essential oils. He says that tests made with that instrument mean very little unless they are confirmed by chemical analysis. In concluding his report Consul CAUGHY expresses the opinion that the American merchant ought, with this information in his possession, "to be able to secure pure essences if he is willing to pay the price for them."



The bitter taste of kola may be removed, according to a German patent (Hugo Hoffmann), by treating the previously moistened powder with hydrogen peroxide.

Essential Oil in Pills.—The following suggestion is communicated to the *Pharmaceutische Rundschau* by E. C. Goetting. Rub 40 drops of essential oil with 20 grains of the best Siam benzoin in a mortar, add 10 grains of powdered borax and 4 drops of glycerin, and mass with liquorice.

Methyl Salicylate a Constituent of Senega.—A member of the Society of Pharmacy of Paris, announces the discovery in senega root of methyl salicylate. He calls attention to the fact that an infusion of the root of *polygala vulgaris* possesses the characteristic odor of wintergreen and gives with iron chloride the reaction peculiar to salicylic acid.—*Répertoire de pharmacie*, vi. 8, p. 374.

Composition of Lanoline.—This fat, according to M. Sanctis, is principally composed of cerotic and palmitic acids, together with small amounts of caproic and oleic acids and traces of stearic, isovaleric and butyric acids. The fatty acids are present in combination with cholesterine and isocholesterine as ethereal salts and perhaps also with other higher homologous alcohols. No glycerin was found.

Sparteine Externally.—The peripheric application of alkaloids in the treatment of acute maladies with cutaneous determination is the subject of a recent communication to the French Academy of Sciences. L. Guinard and Gustave Geley report that they have found the external application of sparteine to give remarkable results in cases where the skin is the active seat of disease, more particularly in case of erysipelas.

Characteristic Test for Lanoline.—Warm about 1 gramme of the fat with 2 grammes of calcium hydrate, taking care to avoid charring of the mass. Rub up the mixture, after cooling, with 5 Cc. water, and shake with 5 Cc. chloroform. Run off the chloroform after separation on to the surface of an equal volume of sulphuric acid, when the characteristic deep-red color of cholesterine is produced at the point of separation.

A New Test for Morphine.—A few drops of the liquid to be examined are placed in a porcelain capsule, with an equal volume of a solution of thirty parts of

uranium acetate and twenty parts of sodium acetate in 1,000 of distilled water. The mixture is evaporated over a water-bath. If the liquid contains morphine there remains a prominent deposit in the form of brownish-red or orange concentric rings. This reaction is said to reveal the presence of morphine in a dilution of 1 to 20,000.

The Influence of CO₂ on Flames.—From experiments made with naked flames results have been obtained showing that the flames of liquid hydrocarbons burnt from wicks require a proportion of carbon dioxide to air, averaging about 15 per cent. of the mixture, for the extinction of ordinary flames. A coal-gas flame burnt from a jet requires as much as 33 per cent. of carbon dioxide in the air to extinguish it; while the hydrogen flame requires no less than 58 per cent. It is of interest to note that the flame of fire-damp is easily extinguished, requiring the presence of only 10 per cent. of the extinctive gas.—*Chem. Trade Jour.*

The miscibility of water with petrolatum.—A paragraph concerning the miscibility of water with petrolatum, which went the rounds of the pharmaceutical press a few years ago, and was recently reprinted in the Paris *Répertoire de pharmacie* has caught the attention of a reader of that journal, who writes to say that the method of incorporating water and watery fluids with petrolatum, by first adding a few drops of castor oil to the petrolatum differs from the one originally recommended by a friend of his, since deceased. This method consists of adding to the petrolatum (or mixture of petrolatum and castor oil) powdered gum arabic, in small portions at a time, until a sufficiency has been added; water can then be mixed with the petrolatum in any desired quantity.

Infant's Food.—N. Oppenheimer communicates to the *New York Medical Journal* the following formula for an artificial food for children:

Mix a teaspoonful of flour and half a cup of cold water; to this add twelve ounces of boiling water and boil for ten minutes in a double boiler. Remove the inner vessel and add to the mixture another twelve ounces of cold water and half a teaspoonful of maltine. Allow it to stand for fifteen minutes in order to let the diastase act upon the starch. Replace the vessel in the boiling water and boil again for fifteen minutes. This mixture, after being strained,

should be added to an equal quantity of fresh milk. Naturally, one may change the proportion of milk according to individual cases.

Salicylated Iron Mixture.—The following prescription is much used in the New York medical clinics in the treatment of chronic rheumatism in which anæmia or other evidence of impaired nutrition is a distinct feature:

Sodii salicylatis.....	3 iv.
Tinct. ferri chloridi.....	℥. 3 iv.
Acidi citrici.....	grs. x
Glycerini.....	℥. 3 iss.
Ol. gaultherie.....	m viij.
Liq. ammon. citratis. q. s. ad.....	℥. 3 iv.

M. Sol. sec. art.

Dissolve the citric acid and sodium salicylate in the liquor ammoniæ citratis.

To the glycerin add the tincture of iron chloride, and then mix the two solutions, to which is finally added the oil of gaultheria.

In this prescription, reaction takes place between the ferric chloride and sodium salicylate, resulting in double decomposition, giving salicylate of iron in first solution. Care should be taken to keep the liquor ammoniæ citratis in slight excess, in order to have a perfectly clear solution of iron salicylate.

Extract of Indian Hemp.—A French pharmacist (M. Carles) having been applied to by a physician to account for the great differences observed in the therapeutic action of samples of this extract obtained from various pharmacies, writes the following account of the preparation of this drug, which appears in the *Répertoire de Pharmacie*: The drug possesses its maximum activity at the time of flowering, and the flowering tops are the most active portion of the plant. Personne, Smith and others agree that the active principle is a resin, mixed with a volatile oil of complex composition. So that the choice of the plant used and its parts has a material effect on the activity of the drug. Three varieties are manufactured in different pharmacies: (1) The hydro-alcoholic extract of the Codex, obtained by exhausting the dry leaves with 60 per cent. alcohol; (2) the alcoholic extract of the international Pharmacopœia, consisting of the extract obtained by 90 per cent. alcohol, extracted with water after driving off the alcohol; (3) the fatty extract is the extract from the flowering tops, taken out with melted butter fat. The third variety is certainly the most active, but as each prepares it according to his own formula, even this cannot be expected to be constant. That of the international Pharmacopœia, of course, loses its value on account of the elimination of the most active ingredients through the extraction with water. That of the Codex is the one, however, that should be supplied, unless ordered to the contrary, and, at all events, it can be relied upon as being very regular in its action and constant in its composition.

Picein, A New Glucoside.—M. Tanret, working in a similar way to that by which he effected the preparation of the vincetoxines and aurantiamarine, has isolated several glucosides from the leaves of *pinus picea*. Of these picein is the most important. Finely chopped

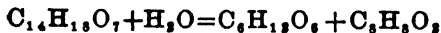
up twigs are treated with boiling water, rendered alkaline by the addition of .5 per cent. of the weight of the twigs of sodium bicarbonate. After a short boiling, the mass is allowed to macerate for 24 hours. The liquid is then filtered off and precipitated with ammoniacal solution of lead acetate. The precipitate is decomposed with H_2SO_4 , and after filtration and exact neutralization with magnesia, to the mixture evaporated to a syrupy consistence, one-third of its weight of $MgSO_4$ is then added, and the whole is extracted with acetic ether. By distilling off the ether, and extracting with cold alcohol, one or more amorphous glucosides are obtained, while the remainder, on boiling with absolute alcohol, deposits, on cooling, fine crystals of picein. The yield is from .3 to .9 per cent. From water it separates with one molecule of H_2O . Its composition is $C_{14}H_{18}O_7$. The following figures were obtained on analysis:

	1.	2.	Calculated for
C	56.32	56.38	$C_{14}H_{18}O_7$
H	6.20	6.28	56.37
			6.04
Water found, 6.10; calculated, 5.69.			

It crystallizes in prismatic silky needles, soluble in their own weight of boiling water, 1 in 50 at $15^\circ C$. It dissolves in 534 parts of cold absolute alcohol, 33 parts of boiling alcohol. It is levorotary.

$$[\alpha]_D = -84^\circ$$

and melts at $194^\circ C$. Under the influence of emulsin, picein takes up a molecule of water and splits up into glucose and piceol:—



Dilute acids produce the same result. The new body, piceol, crystallizes in needles, melting at $109^\circ C$, soluble in 112 parts of cold and 15 parts of boiling water. Perchloride of iron gives a violet color with it. It behaves in all respects as a monatomic phenol, and yields esters with organic acids and compounds with metals.—*Journal de Pharmacie von Elsass-Lothringen and British and Colonial Druggist*.

The best Salt of Quinine for Hypodermic use according to M. Marty, who communicates an article upon the subject to the *Journal de pharmacie et de chimie* is the basic hydrochlorate (Quininæ hydrochloras, U. S. P.) He comments upon the objections to the use of other salts, saying that many are unavailable owing to low solubility in water; to the lactate salt the objection is made that it is not constant in composition; the sulphovinate is decomposed in the presence of water, and the chlorhydro-sulphate which has been highly recommended for hypodermic use, is acid in reaction and not a true chemical compound. The neutral hydrochlorate contains the highest percentage of alkaloid and is fairly soluble in water; antipyrine increases its solubility in water, and the addition of this substance is advised. M. Marty prepares his solution after the following formula:

	Grammes
Quinine hydrochlorate.....	3
Antipyrine.....	2
Distilled water.....	6

Solution is affected by heat. Each

Cc. of the solution contains 30 centigrammes of quinine hydrochlorate. This formula is adopted and recommended by the French *Comité technique de Santé de l'armée*.

Ancient and Modern Pharmacopœias.

By PROF. VIRGIL COBLENTZ.

Prof. Coblenz' new Handbook of the Practice of Pharmacy, which will shortly be issued by P. Blakiston, Son & Company, Philadelphia, will contain the following account of the origin and present status of national pharmacopœias. An extended reference to the new work is given in our editorial columns.

A Pharmacopœia (from $\varphi\alpha\rho\mu\alpha\chi\omicron\nu$

formity in the preparation of medicines, necessary. Real formularies, however, were not composed until much later, about the time of Andromachus, Nero's court physician (about 60 A. D.). After Galen's time, their number gradually increased, but it was not until about the thirteenth century that the more elaborate works (usually called "Antidotaria") made their appearance. The Arabian physicians and their translators during the middle age considerably enriched the literature in this direction. The first work which really deserves the name of a pharmacopœia was composed by Valerius Cordus, and was published after his death, by the city of Nuremberg, in 1546. It was customary in those times to apply the name of "Dispensatorium" to formularies of this kind, and up to comparatively recent times, the term Dispensatory has been

TABLES OF THE MOST IMPORTANT PHARMACOPŒIAS.

COUNTRY.	TITLE OF PHARMACOPŒIA.	LANGUAGE.	NUMBER OF REMEDIES.	ENTERED IN TO FORCE.
Austria.....	Pharmacopœia austriaca. Editio septima.....	Latin.....	(578)	1890
Belgium.....	Pharmacopœia Belgica. Editio secunda.....	Latin and French.....	1140	1885
Chili.....	Farmacopœia Chilena.....	Spanish.....		1886
Denmark.....	Pharmacopœia Danica. Editio tertia.....	Danish.....	584	1893
England.....	British Pharmacopœia.....	English.....	898	1885
Finland.....	Pharmacopœia Fennica. Editio quarta.....	Latin.....	400 (circa)	(Sup. 1899.) 1885
France.....	Codex medicamentarius. Pharmacopœie française.....	French.....	2089 (circa)	1884
Germany.....	Arzneibuch für das Deutsche Reich; dritte. Ausgabe.....	German.....	608	1891
Greece.....	Magyar Gyógyszerkönyv. Második kiadás.....	Latin and Greek.....	976	1868
Hungary.....	Pharmacopœia Japonica. Editio altera.....	Latin and Hungarian.....	576	1888
Japan.....	Farmacopœia ufficiale del regno d'Italia.....	Latin.....	448	1891
Italy.....	Nueva Farmacopœia Mexicana.....	Italian.....	597	1893
Mexico.....	Pharmacopœia Neerlandica. Editio altera.....	Spanish.....		1894
Netherlands.....	Pharmacopœia Norvegica. Editio tertia.....	Latin and Dutch.....	538	Suppl. 1890 1890
Norway.....	Pharmacopœia Portuguesa.....	Norwegian.....		1893 (?)
Portugal.....	Pharmacopœia Romana.....	Portuguese.....	1800 (circa)	1876
Roumania.....	Rosenskaja Farmakopeja.....	Romanian.....	538	1874
Russia.....	Pharmacopœia Suecica. Editio octava.....	Russian.....	808	1891
Sweden.....	Pharmacopœia Helvetica III.....	Swedish.....		1893
Switzerland.....	Pharmacopœia official. Española Sexta edición.....	German, French, Italian.....	1038	1894
Spain.....	Pharmacopœia of the United States of America Seventh Decennial revision.....	Spanish.....	1598	1884
United States of America.....		English.....	994	1893

medicine, and $\pi\alpha\rho\epsilon\iota\nu$, to make) is a code for the use of the apothecary and physician, which embraces the definition, descriptions, physical and chemical properties, tests and methods of preparation of medicinal agents.

The earliest work, which may be compared to our modern pharmacopœias, and of which we have any definite knowledge, is an Egyptian treatise, preserved to us in the Papyrus Ebers, dating back to 1552 B. C. This contains a large number of formulas, some of them quite complex, the ingredients being ordered by certain weights and measures. Nothing else has been preserved to us, in the nature of such a work, within historic times, until we descend to the age of Hippocrates (about 460 to 377 B. C.), who, with his disciples founded a school of medicine, gradually rendering the employment of formularies, to secure uni-

used, in various countries, in the sense of our "pharmacopœia," while we now usually apply it to unofficial commentaries on the latter.

The first United States Pharmacopœia (in English and Latin) was published in Boston in 1820; this has been followed since by the new edition every ten years, prepared by a Committee of Revision appointed or elected by a convention of medical and pharmaceutical colleges and societies. Nearly all foreign pharmacopœias are issued by the authority of their respective governments; the United States Pharmacopœia is not thus issued, but at the same time it is recognized by our government.

There are a number of smaller countries which have no national pharmacopœia, but recognize those of other countries; among these the South American States and West Indies

recognize generally the Spanish, with in some instances, the French Pharmacopoeia. In China, the foreign apothecaries employ their various national pharmacopoeias; while the natives usually follow a voluminous work, entitled *Pus-tsao*, dating back to about

1560 B. C. Any work which takes up the various official (pharmacopoeial) and non-official remedies, and treats upon them exhaustively, in all their applications and uses in Medicine and Pharmacy, is called a "Dispensatory."

AMERICAN PHARMACEUTICAL ASSOCIATION.

THE forty-second annual meeting of the American Pharmaceutical Association was held at Asheville, N. C., from Monday the 3d to Saturday, September 8th. A full account of the proceedings is given elsewhere in this issue. Of the one hundred and five papers presented many are of great value as matters of record, but too long to be presented in extenso in our columns. Below we present either in abstract or in full a number of the more valuable and interesting papers read during the meeting of the association.

Analytical Alkaloidal Chemistry.

By LYMAN F. KEBLER, PH.C., B.S.

Laboratory of Smith, Kline & French Co., Philadelphia.

A century has nearly elapsed since the discovery¹ of the first alkaloid, "morphium," by Serturner, and yet how inefficient and unsatisfactory are the methods generally employed in our era for estimating these active principles.

The earliest methods devised for the detection and estimation of alkaloidal poisons in forensic chemistry were those found effective in removing the alkaloids from the inert matter associated with them in nature. The material was first extracted with dilute acids, aided by gentle heat, the gummy matter and other substances removed with lead acetate, excess of lead precipitated with hydrogen sulphide, and the alkaloid obtained as an impure alkaloidal salt, generally an acetate.

Nearly all of the methods now employed are based on the principles of immiscible solvents introduced by F. J. Otto,² in 1856, as a modification of J. S. Stas'³ method for the recovery of alkaloidal poisons. Ether was first so employed, then followed chloroform,⁴ amyllic⁵ alcohol and finally G. Dragendorff⁶ presented a comprehensive scheme for separation by solvents immiscible with water applied in both acid and alkaline solutions. The plan of separation first published in pharmaceutical journals, primarily for the use of toxicologists, has been extended by chemists everywhere and in every direction, so that

it has become the most convenient method of separating alkaloids for analytical work and manufacturing purposes.

Ingenious and comprehensive as are some of the recognized methods based on the above principles of immiscibility, nevertheless the results are frequently wide from the truth as generally arrived at gravimetrically. Not that the gravimetric part of the assay is deficient, for that portion of the process is recognized as the most reliable of all methods, but the extraction of inert matter through the agency of immiscible solvents prior to the weighing is the detrimental part. Extract the acid solution as long as you please with a given immiscible solvent, yet on rendering the solution alkaline there appears to be a certain amount of the material rendered soluble in the solvent employed. In some cases the quantity is inappreciably small, in others it composes the greater part of the alkaloidal extract. How to eliminate these foreign, not always inert substances, is a question frequently harassing us. As types of the gravimetric process containing this objectionable feature may be mentioned the methods of Losch, Hager, Lyons, Lloyd, Thompson, Beckurts, Dietrich, etc.

It is not necessary to go into the merits and demerits of the methods, suffice it to say that each is favored with both more or less. Even the officially recognized method for assaying opium and opium preparations comes to share the spoils in this direction, for as high as two per cent. of foreign matter has been found in some of the samples of morphine obtained by this process.

To be sure there are special methods for separating alkaloids in a state of purity, as that introduced by Scheibler,⁷ based principally on phosphotungstic acid and chloroform; another initiated by T. B. Groves,⁸ using potassium-mercuric iodide and an immiscible solvent; also a third method based on Sonnen-schein's⁹ reagent, sodium phosphomolybdate, and an appropriate solvent. By employing these latter processes, we are enabled to secure a product of considerable purity, at no inconsiderable loss, however. Nor is this all, but these methods can be neither expeditiously

executed nor economically employed in an analytical laboratory where many analyses are made daily.

The germ of a very important method was introduced by P. Bouilly,⁴ later announced by P. A. von Bondsdorff⁵ and F. L. Winckler,⁶ in the alkaloidal reagent potassium mercuric iodide. A. von Planta-Reichenau⁷ reported the use of the tenth-normal solution of this reagent, substantially as presented in its practical form by F. F. Meyer.⁸

Most alkaloids are completely precipitated from aqueous acid solutions by a solution of potassium mercuric iodide. It has generally been assumed that these iodomercurates consist of a double iodide of the base with mercury, but there is a great discrepancy between fact and theory when attempting to verify this general assumption. The precipitates are far from being constant, varying with the degree of concentration, temperature, manner of adding the reagent, and many other minor points. Titrations executed under the same conditions precisely, often vary appreciably from one another, although they give close approximations to the truth in some instances.

A point deserving especial mention in this connection, is what may be termed equilibrium; that is, a condition in titration of such a nature that on addition of either the reagent or the alkaloidal solution, a further precipitation occurs.

In spite of the imperfections clustering around this method, it certainly extends to us a tempting short cut to arrive at comparative values of the various alkaloidal plants, and contains in it a step (titration) which introduces us to a truly scientific method; titration with volumetric acid solutions; which consigns Mayer's reagent to the past as of quantitative value.

The employment of volumetric solutions in estimating the potency of alkaloidal plants, is current with alkaloidal chemists abroad, and heartily sanctioned by many of our fellow-countrymen; nay, some have even expressed themselves publicly as to its being the only scientific and reliable method. It is to the latter that the writer would bring a word of encouragement. For some time the author has been collecting data bearing on this point, which are expressed in the table below.

That this method is confronted by no obstacles no one claims; in fact, we frankly admit that several questionable elements enter it *prima facie*, and give reasons of doubt as to its absolute correctness. Taking these defects and calculating them at the utmost, we find ourselves nearer the truth than by the results obtained by the general gravimetric methods.

The first defect deserving of mention

¹ 1857, *Ann. der Phys. Pogg.*, 37, 99; *Ann. Chim. Phys.*, (2), 34, 345.

² 1859, *Ann. der Phys. Pogg.*, 93, 243.

³ 1850, Buchner's Repertorium, 35, 57.

⁴ 1846, "Das Verhalten der Alkaloide gegen Reagentien," a dissertation at Heidelberg.

⁵ 1862, *Am. J. Pharm.*, 35, 80; *Chem. News*, 7, 159; *Chem. News*, 8, 177 and 189.

⁶ 1862, *Am. J. Pharm.*, 35, 80; *Chem. News*, 7, 159; *Chem. News*, 8, 177 and 189.

⁷ 1862, *Am. J. Pharm.*, 35, 80; *Chem. News*, 7, 159; *Chem. News*, 8, 177 and 189.

⁸ 1862, *Am. J. Pharm.*, 35, 80; *Chem. News*, 7, 159; *Chem. News*, 8, 177 and 189.

¹ Dict. Applied Chem. (Thorpe), vol. 3, page 900; *Handwörterbuch der Chemie* (Ladenburg), Vol. I., page 214.

² 1856, F. J. Otto, *Ann. (Liebig)*, 100, 39.

³ 1852, J. S. Stas, *Bull. de l'Académie de médecine d. Belgique*, 9, 304; *Ann. (Liebig)*, 34, 379; *Jahresber. der Chemie*, page 640.

⁴ 1857, J. E. D. Rodgers and G. P. Girwood, *Pharm. J. Trans.*, 16, 497.

⁵ 1861, L. Usler and J. Erdmann, *Ann. (Liebig)* 120, 121.

⁶ 1857, G. Dragendorff, *Pharm. Ztschr. f. Russ.*, 6, 66; *Russ. Arch. f. gericht. Med. J.*, 1; *Ztschr. anal. Chem.*, 7, 521.

⁷ 1876, *Die gericht. chem. Ermittl. v. Giften*, page 141.

TRANSLATIONS: A. B. Prescott, 1875; *Outlines of Proximate Organic Analysis*, page 136; S. D. Hayes, 1876; *Am. Chem.*, 6, 378.

H. G. Greenish, 1884; *Plant Analysis*, Eng. Ed., page 48.

¹ 1873, *Tageblatt, der Versammlung deutscher Naturforscher und Aerzte zu Leipzig*, page 115; 1873, *Ztschr. Anal. Chem.*, 12, 315.

² 1864, *Pharm. J. Trans.*, (2), 6, 568.

³ 1857, *Ann. (Liebig)*, 104, 45.

is our imperfect knowledge of the molecular weights of several of the alkaloids, as emetine, aconitine, gelsemine, etc. This deficiency can be obviated only by diligent research, which will furnish us with the needed formulæ. The second defect lies in this, that some of the drugs contain two or more alkaloids of different molecular weights, as nux vomica, cinchona, aconite, etc. This compels us to assume that the alkaloids exist in a certain relative proportion in order to arrive at a molecular weight on which to base our calculations, and can be remedied only by determining by careful analyses the definite amount of each alkaloid.

When we reflect a moment on the advancement the volumetric method represents, all with one accord must say that the amount of alkaloid represented by each titration is absolutely correct. A point in this connection should, however, engage our serious attention, and that is the method employed for extracting the alkaloid. One method is better suited for one drug than another, consequently we should endeavor to so execute our work that each drug be thoroughly tested by a number of workers with every economical process, and that process giving the most uniform results, as well as the highest, should be the one adopted by all alkaloidal chemists. Mr. Karl Schwickerath¹ has set us a most excellent example in his study of the "perforation method." The result will be that a preparation standardized in California will have the same therapeutical strength as a similar article assayed in

Maine. As it is at present, almost every analyst uses a different process for standardizing and assaying a given drug, and the results are as variable as are the number of manipulators.

A single example sets forth the variability of the different methods with sufficient momentum to cause every diligent worker to reflect seriously. Fluid extract of belladonna leaves, with the gravimetric processes the variability ranged from 0.493 per cent. to 0.401 per cent.; with the potassium mercuric iodide reagent from 0.781 per cent. to 0.763 per cent., and the volumetric method gave us from 0.223 per cent. to 0.214 per cent. The material was taken from the same bottle and all assays made within forty-eight hours of one another, with at least duplicates in every case.

In the table below are given the maximum, minimum and mean results of the majority of the practical gravimetric processes, Mayer's reagent and volumetric acid solutions.

The methods of procedure generally employed were those outlined in Allen's Com. Organic Anal., Prescott's Organic Anal., Lyon's Pharmaceutical Assay, Dragendorff's Die Chemische Werthbestimmung, starkwirkender Drogen, and later methods in literature not collected and placed in textbooks.

A short perusal of the results portrayed in the above table clearly reveals the desirability of a more uniform system of assaying the various alkaloidal plants and their preparations.

In titrating with volumetric acid solutions the indicator is one of the first factors to be called into requisition. The behavior of the alkaloids with indicators presents some remarkable differ-

ences. Methyl orange can be used generally in titrating the alkaloids with mineral acids. Litmus and phenolphthalein¹ are applicable to the strongly basic alkaloids, but are worthless for the feebler ones. Lacmoid has been employed by Van Itallie² for titrating certain alkaloids with hydrochloric acid, and E. Dieterich³ used rosolic acid, but his results leave the value of the indicator in doubt. C. C. Keller⁴ in his extensive communications on the valuation of drugs employs hæmatoxylin as the indicator and hydrochloric acid for titrating. Brazil wood has recently been reported as very efficient,⁵ and adopted by the United States Pharmacopœia of 1890 for titrating nux vomica and its preparations, but cochineal has proven most efficacious in the writer's hands for all alkaloids.

In titrating with cochineal or methyl orange it is seldom convenient to employ an aqueous solution of the alkaloid. A solution of the base in dilute alcohol is quite suitable, the indicators being very sensitive in this menstruum.

Occasionally the alkaloidal residue is abundantly contaminated with coloring matter, extracted with the alkaloid from its natural sources. In such cases the following ingenious method, due to A. H. Allen,⁶ is very useful. Dissolve the residue in a small quantity of ether, transfer the solution to a small glass-stoppered cylinder, add a few cubic centimeters of water colored with the indicator. The standard acid solution is gradually added in drops and the solution well agitated after each addition. Under these conditions the end reaction is easily determined, for the coloring matter in the upper ethereal layer presents a strong contrast to the lower colored aqueous stratum.

The principles of volumetric analysis are so well known, that it seems quite unnecessary to give the method of procedure in detail.

The acid solutions found to give the most uniform and satisfactory results were twentieth-normal solutions of sulphuric and hydrochloric acids. The acid is added in slight excess, and titrated back with a centinormal solution of potassium hydroxide.

In conclusion, the writer would urgently recommend the adoption of a certain method for extracting the base or bases from each alkaloidal plant, and titrating the residue with a volumetric acid solution in order to obtain uniform results with every drug.

¹1887, P. C. Plugg, *Arch. der Pharm.*, (3), 25, 45 and 49.

²1879, *Nederl. Tydich. v. Pharm.*, Jan.; *Analyst*, 14, 118.

³1887, *Pharmaceut. Centralhalle*, 28, 81; *Am. J. Pharm.*, 59, 179; *Pharm. J. Trans.*, (3), 17, 888.

⁴1894, *Wochenschr. f. Chem. u. Pharm.*, 32, Nos. 5, 6, 7, 12 and 13 (and *AMERICAN DRUGGIST*, vol. xxv, 2, pp. 54-96.)

⁵1893, C. Caspari and A. R. L. Dohme, *Am. J. Pharm.*, 65, 473; *Proc. Am. Pharm. Assoc.*, 47, 118.

⁶Com. Organic Anal., Vol. 3, pt. 2, p. 131.

NOTE.—In answer to the query, with what drugs does the ferric hydrate process give uniform results? I would say that all of the drugs in the above table gave me satisfactory results as a gravimetric process, excepting aconite leaves and sometimes the root, belladonna leaves, coca leaves, conium fruit, henbane, jaborandi and veratrum viride.

¹1893, *Bull. Pharm.*, 7, 314, and 1894, *Ibid.*, 8, 246.
²1893, Van Leden Hulsebosch, *Pharm. Centralhalle*, 34, 101 (and *American Druggist*, Vol. xxii, p. 850, 378, Vol. xxiii, p. 113.)

SUBSTANCE.	GRAVIMETRIC.			MAYER'S REAGENT.			VOLUMETRIC ACID.			Decinormal Factors.
	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	
Aconite root	1.140	1.080	1.100	1.380	1.261	1.310	1.018	0.987	0.975	0.0647
Fl. ext. aconite leaves...	0.481	0.301	0.366	0.428	0.315	0.371	0.397	0.193	0.242	0.0647
Fl. ext. aconite root.....	0.826	0.700	0.768	0.978	0.928	0.949	0.945	0.906	0.935	0.0647
Fl. ext. belladonna leaves (a).....	0.468	0.401	0.447	0.781	0.768	0.772	0.828	0.814	0.828	0.0889
Fl. ext. belladonna leaves (b).....	8.356	0.325	0.341	0.349	0.325	0.337	0.315	0.308	0.309	0.0889
Fl. ext. belladonna root.....	0.350	0.350	0.350	0.378	0.357	0.366	0.331	0.317	0.324	0.0889
Fl. ext. blood root.....	1.710	1.581	1.630	1.135	1.091	1.113	Too much coloring matter.			
Fl. ext. cinchona red...	5.134	3.563	4.343	Unreliable.			4.521	3.833	3.142	0.0814
Fl. ext. cinchona comp.	1.844	1.584	1.664	Unreliable.			1.315	1.613	1.464	0.0814
Fl. ext. coca leaves.....	0.337	0.436	0.541	Unreliable.			0.621	0.440	0.531	0.0898
Fl. ext. colchicum root.....	0.387	0.352	0.374	0.647	0.561	0.604	Unsatisfactory.			0.0899
Fl. ext. colchicum seed.....	0.707	0.683	0.580	0.971	0.646	0.808	Unsatisfactory.			0.0899
Fl. ext. conium fruit.....	0.778	0.631	0.653	Unreliable.			0.680	0.531	0.600	0.0137
Fl. ext. gelsemium.....	0.397	0.314	0.355	0.497	0.450	0.473	0.367	0.301	0.334	0.0408
Fl. ext. guarana.....	3.809	3.746	3.777	Does not precipitate.			Impracticable.			
Fl. ext. henbane.....	0.179	0.114	0.146	0.308	0.312	0.300	0.152	0.112	0.132	0.0289
Fl. ext. hydrastis berberine.....	2.889	2.766	2.847	Unsatisfactory.			2.536	2.431	2.483	0.0835
Fl. ext. hydrastis hydrastrine.....	2.000	1.981	1.965	Unsatisfactory.			1.634	1.457	1.545	0.0397
Ipecac root.....	2.800	2.000	2.400	2.693	2.000	2.346	2.481	1.983	2.307	0.0854
Fl. ext. ipecac root.....	2.371	2.163	2.112	2.365	2.193	2.228	2.133	2.002	2.062	0.0254
Fl. ext. jaborandi.....	0.621	0.538	0.577	Unsatisfactory.			0.540	0.418	0.478	0.0108
Nux vomica bean.....	1.813	1.732	1.767	1.911	1.833	1.871	1.732	1.686	1.715	0.0364
Fl. ext. nux vomica.....	1.698	1.631	1.664	1.496	1.401	1.448	1.521	1.501	1.511	0.0864
Solid ext. nux vomica.....	15.431	15.129	15.275	15.020	14.890	14.955	15.231	14.963	15.097	0.0864
Powd. ext. nux vomica.....	18.435	18.309	18.322	18.013	17.973	17.993	18.103	17.941	18.022	0.0864
Fl. ext. stramonium seed.....	0.473	0.397	0.435	0.375	0.366	0.365	0.385	0.312	0.348	0.0289
Fl. ext. stramonium leaves.....	0.376	0.334	0.355	0.525	0.500	0.512	0.317	0.289	0.308	0.0289
Fl. ext. veratrum viride.....	1.045	0.400	0.722	1.361	1.134	1.247	1.080	0.137	0.588	0.0687

Improved Elixir Valerianate of Ammonium.

BY SAMUEL C. DAVIS,

Morton, Ill.

In all pharmacies, the making of Elixir Valerianate of Ammonium is one that is dreaded on account of the disagreeable odor that will invariably fill the laboratory, and generally the pharmacy proper, when the preparation is finished on account of the necessity of filtration which occurs in nearly all cases.

The working process of the National Formulary reads: Dissolve the valerianate of ammonium in about 12 ounces of aromatic elixir, in a graduated vessel, and add enough water of ammonia in drops until a faint excess of it is perceptible in the liquid. Then add the chloroform, tincture of vanilla and compound tincture of cudbear, and finally enough aromatic elixir to make 16 ounces. Filter if necessary.

These words, "Filter if necessary," are very conveniently used, as it is in variably necessary to filter.

As we all well know, the commercial salt of valerianate of ammonium is the acid salt having the formula $\text{NH}_4\text{C}_8\text{H}_5\text{O}_2$, or graphically:

CH or Iso. Valerianate of Ammonium.

CH_2

COO.NH_4 .

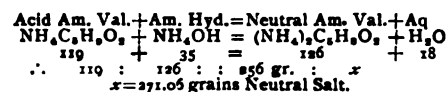
Which salt does not form a permanent solution in the vehicle used as a solvent in the elixir, therefore the ammonia water is added to form the neutral salt, which does form a permanent solution, and has the formula $(\text{NH}_4)_2\text{C}_8\text{H}_5\text{O}_2$, or graphically:

CH or Neutral Ammonium Valerianate

CH.NH_4 .

COO.NH_4 .

And the required amount of Water of Ammonia necessary to produce this change in the 256 grains of Acid Salt required in one pint of the elixir is accurately estimated as follows, and therefore does not have to be measured or rather guessed at drop by drop:



271.05 gr.—256 gr.=15.6 gr. NH_4OH required, and as NH_4OH U. S. P. contains only 10 per cent. by weight of NH_3 , it would require 156.6 grains of NH_4OH to neutralize the acid salt and form the neutral salt of Ammonium Valerianate; but to save the necessity of weighing the NH_4OH , I have reduced the 156.6 grains to minims.

Aqua ammonia having a specific gravity of 0.96, it would require 156.6 minims of aqua ammonia U. S. P., to complete the equation, but as a slight excess is necessary, I use 180 minims or 3 fluidrachms.

I therefore submit to you the follow-

ing working formula, which I have tried and found satisfactory:

Add 3 fluidrachms aqua ammonia U. S. P., to 5 fluidrachms of water, and in this dissolve 256 grains ammonium valerianate, which solution is now added to 12 fluidounces of aromatic elixir; then add chloroform, tincture of vanilla and compound tincture of cudbear (in quantities as per N. F.), and agitate; now add q. s. aromatic elixir to make 16 fluidounces.

Alligation in Pharmaceutical Calculations—Its Usefulness and Limitations.

BY T. D. REED, M.D.,

Prof. Mat. Med. Montreal College of Pharmacy.

The necessity for the information which this kind of calculation may furnish, arises from time to time in chemical and pharmaceutical work. The arithmetical principle is ancient, and its application in pharmacy is referred to in Ure's Dictionary half a century ago, some of its limitations being also pointed out. The introduction of standardized drugs has caused some attention to be given to the subject, and we find it cropping up in journal literature and being introduced into examination papers.

The author of a student's manual makes this extraordinary claim, in reference to Alligation, in a preface dated 1892: "Its application to the uses of the pharmacist originated with the author, * * * it was first submitted to the pharmaceutical public on the debut of this work."

To establish priority here will be about as difficult as in the case of the use of any other mathematical principle.

The possibilities in application of alligation seem not to have been fully recognized in some quarters, for we find in an examination paper recently the following problem: Required 90 ozs. of pulv. scammon., that will assay 62.5 per cent. resin, by the admixture of powders, assaying, respectively, 75 per cent., 70 per cent., 53 per cent.; how much of each will be required?

Now this question permits of three answers in whole ounces, thus: 18 oz. 75 per cent., 27 oz. 70 per cent., 45 oz. 53 per cent.; 1 oz. 49 oz., 40 oz.; and 35 oz., 5 oz., 50 oz.—and taking any quantity for any one strength, a series of fractional quantities is obtainable, so that the answers are unlimited. Alligation will give an answer in fractional quantities, and that is all it will do.

The mistake here made, we think, is in overlooking the fact that, for mixtures of more than two strengths, there cannot be a fixed answer.

In the manual before referred to, the following "Example" is given: "How many grams each of powdered opium, assaying respectively, 9, 10, 12, 16 and 18 per cent. morphine, must be used to make a mixture of 100 grams, that will contain 14 per cent. morphine?"

In this case, any even number given to the 9 per cent., from 42 downward, will give a numerous series of whole numbers, so also any number from 54

downward given to the eighteen per cent. will meet the requirements, and thus a hundred answers may soon be produced without fractions; still the answer given in the book has all the quantities in milligrams, and not exact even then. Here are two illustrations of integral quantities; 42, 9 per cent.; 1, 10 per cent.; 2, 12 per cent.; 1, 16 per cent.; 54, 18 per cent.—2, 40, 1, 28, 29.

Evidently the little word *must*, which I have italicised, is out of place in such a question.

Another mistake is the use of the principle to make mixtures of a new specific gravity from liquids of given specific gravities. Nearly all solutions of different gravities, when mixed vary in volume, some considerably. Alcohol and water, it is well known, also manifest condensation, so that the principle is not applicable. This was noted by Ure long ago. Dilutions to a new percentage by weight, however, may be calculated, for instance, to make a liquor of 10 per cent. by weight from one of 25 per cent. The conditions here are 0, 10, 25, and all we have to do is to take 10 pounds, ounces, etc., of the strong, and dilute up to 25 with water.

To deal with more than two strengths, then, it can only be said that alligation will furnish an answer, and this will suffice in many cases. If there are conditions, such as whole ounces and other limitations, we must have recourse to algebra, of which, however, only an elementary knowledge will be sufficient. Here is an example communicated by the writer to the *Montreal Pharmaceutical Journal*: "How shall we make 4 gallons of English laudanum (opium 10 per cent.), with samples of opium of 7½ per cent., 9 per cent., and 11½ per cent. morphia strength respectively, using whole ounces of each, and as much as possible of the weakest?" For this we have to find quantities which give 48 oz. averaging 10 per cent. Alligation will not supply the figures required. We may assume the required quantities as $a + b + c = 48$, and applying the simple principles of algebra, we find 13 oz. of 7½ per cent., 8 oz. of 9 per cent., and 27 oz. of 11½ per cent., fulfill the conditions of the question.

In chemical analysis, the principle of alligation is sometimes usefully applied, as for instance in a mixture of known weight, containing two compounds, with only three different elements, e. g., potassium and sodium chloride, or potassium iodide and potassium chloride—the possible precipitates being one above and one below the given precipitate. This application is noted in the early editions of Fresenius.

The powers and possibilities of numbers constitute an interesting and even fascinating study, but it must be remembered that fixed results can only flow from fixed conditions.

The National Formulary.

A Critique upon Criticisms.

BY LUTHER F. STEVENS,

Brooklyn, N. Y.

Among general objections which have been brought forward by many good

workers, a large one which seems to have impressed even the chairman of the committee, is that there are too many preliminaries—"simplification" has become the theme. A smaller force are those whose hobby it is to replace alkaloids in every formula, no matter what, where a corresponding galenical is in use.

Then come gentlemen who wish to throw out talcum because it is a mineral, tincture of citro-chloride of iron because it does not happen to suit their chemical fancy, and chloral camphor "as its defects are well known to every one" (I confess to ignorance there).

Then there are samples of laziness who air the fact in letters to the committee and the trade journals, that "they have no laboratory" and "our counters keep us too busy," besides other excuses which might be quoted by pages. Objectors are always plentiful and occasionally receive more attention than do the answers given them; for such and their friends pay very little attention to anything disparaging to their theories.

To the first mentioned class, as honest in their convictions, allow me to remark, that one advantage of the present arrangement is that work and time are concentrated upon seven main foundations, from which sixty-seven elixirs may be easily built; the reason for this plan being to secure uniformity in products, that fine oils can be handled in sufficient bulk, and *quickly*, to be free from any terebinthiation, and that flavors may develop. The final results then are far ahead of anything that can be got from one or two basic elixirs, for there is such a thing as sacrificing fineness to apparent convenience.

Regarding the alkaloiders, an advanced sample of their desires was shown when they flocked about the working committee seven or eight years ago with the same plea as now, and worse, a large contingent seeking the countenance of the A. P. A. unceasingly for the entrance of mixed alkaloids in place of bark for an elixir which was to receive the title of Calisaya.

The talcum-hater, despising silicate of magnesia, probably in all severity uses the carbonate; if not, phosphate of calcium or its carbonate, and is satisfied with his method.

NO. 63 ELIXIR OF PHOSPHATE OF IRON, QUININE AND STRYCHNINE.

It is impossible to obtain stability with this or any formula similar to it; such was not the intention and it makes no difference whether alkaloids or salts are present, the change ultimately occurs. The present form was adopted to hinder as long as possible that which must happen, and all improvements or changes which have appeared in print since its publication were tried at the same time and in competition and found less valuable.

Very radical changes will be necessary if keeping qualities are to be paramount.

Patch's "Three Phosphates" are such, but the result and elixir are so widely

different from those usual, that a market will have to be manufactured. However, if actual phosphates are of value, this meets the need, and will eventually pay for time spent in arriving at a good flavor, and in making known to physicians.

NO. 370 COMPOUND SYRUP OF HYPOPHOSPHITES.

This, like No. 63, is valuable partly because it is upon the verge of going to pieces; in other words it is somewhat in the nascent condition, a slight change in manipulation explained in the full text of this paper puts off that final reaction for a reasonable time, which is the most that can be done except by reducing the medicinal content, the latter a result of several recently published formulæ.

NO. 54 AROMATIC ELIXIR OF YERBA SANTA.

This as it stands furnishes a better extemporaneous cover to the taste of quinine than anything yet devised for this purpose, and when sent out as a mixture *improves upon standing*, growing thinner and pleasanter in taste.

The process is simple, though requiring time for sediment to deposit, and depends upon a small addition of de-resined yerba to elixir taraxacum compound and syrup. An alternate in the way of syrup is offered in No. 361.

NO. 254 CHLOROM ANODYNE.

A radical change from accustomed forms in print is given here; it is a *scientific modernly built emulsion* containing but little alcohol. Deodorized tincture of opium, so bewailed by the alkaloid cranks, appears because more anodyne and less soporific than morphine, and because it can always be had of definite strength, being an uncertain compound only upon connivance of the party using.

Where more alcohol and greater pungency is needed No. 41 is advantageous.

It is noticeable that all recommendations for change and formula offered since 1888 are based upon ancient literature, and upon analysis not representing the proprietary which started all these mushroom growths. One, which may be taken as typical, was offered to the committee in 1893, has nearly one-half alcohol, close upon $\frac{1}{2}$ gr. of morphine sulphate to each fluid drachm, with four minims of hydrocyanic acid. This is, as others are, steps backward.

NO. 253 COMPOUND MIXTURE OF CHLORAL AND POTASSIUM BROMIDE.

This is a suspension or emulsion of resinous and alkaline medicinals in an almost wholly aqueous menstruum, when those peculiarities are desired, as seems frequent. The dosage claimed can be relied upon, as it is not all in printer's ink, but in the mixture. Some well known gentlemen hold that the compound is unsatisfactory; but others who have handled it extensively are satisfied and prefer its being retained until a better formula is devised.

NOS. 290 AND 390 PILL AND TINCTURE ANTIPERIODIC.

A certain difference between these in relation to contained aloes has aroused some comment. The change was made purposely at the request of an immense number of physicians, but through oversight the reason was not stated during the final editing.

NO. 114 TO 123 EMULSIONS OF COD LIVER OIL.

The complaint against this line is: "We gave too much." Seeing that the suggestions were entirely free, an old adage regarding receivers of gifts might fit here. Actually the supply was made large to allow a selection to meet emergencies or to fit different localities.

NO. 202 SOLUTION OF ACID PHOSPHATES.

This is a most simple process modified for small work from the original German statement, which is also the source from which sprang certain proprietary articles. The product is much stronger and is the natural combination of acid phosphates of potassium, calcium, iron, magnesia and manganese occurring in bone structure.

NO. 67 ELIXIR OF GENTIAN.

Some think this will be much improved if made from an equivalent amount of fluid extract. The solid extract being made from a more aqueous menstruum is less intensely bitter and more nearly fills the rôle of an elixir. Try them side by side.

NO. 42 ELIXIR CINCHONA.

Several have suggested adding a modicum of glycerin to the mixture while preparing. It might be well worth trying, as its solvent power may assist in holding the native alkaloidal salts in the very dilute alcoholic menstruum.

NO. 27 ELIXIR VALERIANATE OF AMMONIUM.

A gentleman wishes this to be revised in such a manner that the dosage would be largely reduced and the flavor which here covers very well, done away with for a much less able one. The complete paper will state the facts more in detail.

With the push and rush of pharmaceuticals, much of this material gathered now some years ago, may be of less need and other more popular matters of the time advanced. But it is the work of this unofficial guide to act as scout and skirmish line to the more stolid and conservative Pharmacopœia.

No one with an interest in our future objects to advance work, or is afraid of that which must come.

The Relative Alkaloidal Value of Two Kinds of Ipecac Root.

BY ALFRED R. L. DOHME,
Baltimore, M. D.

About a year ago the writer reported upon some experiments with Ipecac Root made to determine the comparative value of the various forms of the latter met with in commerce. It was

then shown that the thick annulated root commonly called "Fancy Root" did not always contain the most alkaloid, and was not hence always the most valuable. It was shown that the thin smooth root commonly termed "Wiry Root," contained more alkaloid than this, and by a combination of analytical and microscopical examination an explanation of this was attempted. It was shown that the central woody portion contained little or no alkaloid, and that this was to be found mainly in the cortical envelope, and mainly concentrated in the cork layers and cortical parenchyma adjacent to the latter. It was also pointed out that the microscopical examination of the cross-section of ipecac root showed that the colored portions of the root were to be found in the cork layers and cortical parenchyma cells adjacent to them, and that these portions resembled in color the residues from the final extract obtained in assaying the drug and which were weighed as alkaloid in gravimetric determinations. The color is the same as that of ipecacuanhic acid with which the alkaloids are combined in the drug and hence serves to locate them. The thin smooth root above referred to was shown to Prof. Flückiger while he was in Baltimore and pronounced by him to be rather a stem than a root, and most probably that part of the root near the surface of the ground which merges the root into the stem. It shall as before be termed "Wiry Root" in this article. The following results were then found and reported:

"Fancy" A yielded 1.36 per cent. of alkaloids by titration with volumetric acid solution.

"Fancy" B yielded 1.29 per cent. of alkaloids by titration with volumetric acid solution.

"Fancy" C yielded 1.36 per cent. of alkaloids by titration with volumetric acid solution.

"Fancy" D yielded 1.44 per cent. of alkaloids by titration with volumetric acid solution.

"Wiry" A yielded 2.03 per cent. of alkaloids by titration with volumetric acid solution.

"Wiry" B yielded 1.88 per cent. of alkaloids by titration with volumetric acid solution.

"Wiry" C yielded 1.69 per cent. of alkaloids by titration with volumetric acid solution.

"Woody Portion" A yielded 0.56 per cent. of alkaloids by titration with volumetric acid solution.

"Woody Portion" B yielded 0.55 per cent. of alkaloids by titration with volumetric acid solution.

"Woody Portion" D yielded 0.44 per cent. of alkaloids by titration with volumetric acid solution.

"Wiry scrapings" A yielded 2.18 per cent. of alkaloids by titration with volumetric acid solution.

"Wiry scrapings" B yielded 2.17 per cent. of alkaloids by titration with volumetric acid solution; where A, B, C and D are separate and distinct samples of Ipecac Root, each, however, containing both "fancy" and "wiry" root.

In order to more directly compare the various parts of the two kinds of roots

above described, the cortical envelope was removed from the central woody cylinder above called "Woody Portion," and each assayed separately. The cortex was in each case scraped from the woody central cylinder by means of a knife and the woody cylinders closely examined so as to be certain that no particles of cortex still adhered to them. All were then ground to a No. 80 powder and assayed. The method of Mr. C. C. Keller of Zurich, was used instead of Lyons' method, which had been used last year. This was done for two reasons: first, because it gave better results, and second, because it was found to be more expeditious. The method of Keller is quite simple and is being applied by its author to all alkaloidal drugs.

It consists in treating the drug directly with ether and chloroform, usually three parts of ether to one of chloroform by weight, shaking well for five minutes, then adding sufficient ammonia water and shaking well for half an hour. Then some water is added to clog the drug powder together and an aliquot part is poured off and at once treated with dilute acid in a separatory funnel. The acid solution is made alkaline with ammonia and extracted with ether-chloroform, the chloroform usually in excess to facilitate separation. The extracting fluid is let into a small flask and the ether-chloroform distilled off on a water bath. By adding a little ether and alcohol, the last portions of chloroform can be successfully removed on the water bath. The residue, consisting of the alkaloids usually in a good state of purity, is then titrated with acid and alkali, using Brazil wood or litmus as an indicator. The following results were obtained:

Cortex of "fancy" root yielded 1.68 per cent. of alkaloids by titration.

Cortex of "wiry" root yielded 3.15 per cent. of alkaloids by titration.

Woody portion of "fancy" root yielded 0.17 per cent. of alkaloids by titration.

Woody portion of "wiry" root yielded 0.50 per cent. of alkaloids by titration.

These roots were picked from the same sample of ipecac root, which contained both varieties in about equal quantity.

This verifies the results obtained last year and justifies the conclusion that the so-called "wiry" root, i. e., the upper part of the root which frequently is in part a stem, contains more alkaloid than the lower or annulated part. The explanation of this fact is easily given. The cork cells and cortical parenchyma adjacent to them are the seat of the alkaloids. A piece of "fancy" root weighs more than a piece of "wiry" root of the same size, because of the excess of starch in the former. It hence takes three pieces of the same length of "wiry" root to make up the same weight as two pieces of "fancy" root. The percentage of outer bark, i. e., cork cells and adjoining cortical parenchyma is in consequence greater in case of the "wiry" than in case of the "fancy" root, which is only another way of saying that the percentage of alkaloids is greater in the former than in the latter.

This also explains why so much more alkaloid was found in the comparative cortex assays in the "wiry" than in the "fancy" root; for given the same weight of both, there was more wood removed when the cortex was scraped from the woody cylinder in case of the "wiry" than in case of the "fancy" root, and it required all the more of the "wiry" cortex to make up this loss, since the percentage of wood in the "wiry" is about three times that in the "fancy" root. This is equivalent to an addition of alkaloid, since the cortex is the seat of the latter.

A Method For the Estimation of Mono- and Bi-carbonate of Sodium.*

By W. T. WENZELL,

California College of Pharmacy, San Francisco.

The writer presented a method for the analysis of bicarbonate of sodium, which he originated six years ago, and which has been used with concordant results in numerous instances.

The process on which this analysis is based depends upon the following data:

1. The percentage amount of carbon dioxide contained in sodium bicarbonate = 52.38095.

2. The percentage amount of carbon dioxide contained in sodium mono-carbonate = 41.50943.

3. The difference between the two percentage amounts of the two carbonates $52.38095 - 41.50943 = 10.87152$.

4. A factor representing one per cent. of this difference, $10.87152 \div 100 = .1087152$.

From the foregoing amounts the following data have been proposed for formulating the analytical process:

A. = Percentage amount of CO₂ obtained by the actual analysis of the sample.

B. = Theoretical percentage of CO₂ contained in the sample, calculated as NaHCO₃.

C. = The difference between the respective amounts of A and B.

D. = The factor representing 1 per cent. of the difference of the amounts of CO₂ contained respectively in NaCO₃ and NaHCO₃.

E. = The percentage amount of Na₂CO₃.

F. = The percentage amount of NaHCO₃.

G. = The total percentage amount of mixed carbonates in the sample.

FORMULA.

$$A - B = C.$$

$$C \div D = E. (E = \text{Na}_2\text{CO}_3.)$$

$$E - G = F. (F = \text{NaHCO}_3.)$$

Pharmaceutical Bacteriology.

By ROBERT G. ECCLES, Ph.G., M.D.

The impression prevails that medical men alone should interest themselves in bacteria. It is assumed that the subject contains nothing of interest to pharmacists. It requires no prophet to foresee that this attitude is not likely to be maintained very much longer. The indications are that Pharmaceutical Bacteriological Laboratories are a certainty of the future,

*Abstract.

and that they may exceed in vastness and importance those now conducted by the medical profession. As yet we have only hints of what is in store for us. Here and there a rift in the cloud that obscures the future from our vision lets through an illuminating beam of light.

It is said in Holy Writ that "that which hath been is now and that which is to be hath already been." In the vast laboratory of nature long before man had synthesized a single remedy or combined, *secundum artem*, a single pair of synergistic remedies, plants had done the same. Yes, and more, it can now be maintained with a formidable array of evidence that the aim of such combination was precisely that of the pharmacist and physician when a remedy is compounded for a patient. In both cases the overcoming of pathological disease germs was the ultimate result and the object aimed at, if there was any aim. The resins, the essential oils, the tannins, the alkaloids, the glucosides, the bitter principles are all so many bacteria killers or inhibitors devised by plants or produced by the direct action of bacteria themselves, that in the economy of nature serve to give immunity to plants against the ravages of other organisms.

THE USES OF ALKALOIDS TO THE PLANT.

As if quinine was not enough to shield the true cinchonine and other synergists that accompany it, with morphine is combined codeine, narceine, and a host of other alkaloids having analogous effects. The life history of these plants casts a flood of light on this subject, and if we had anything like a perfect genealogical history of any genus there can be but little doubt that it would fully confirm all we are able to infer from the immediate data at our command. In the cinchonas we have more material on which to base an inference in this respect than any other. Their habitat is a region of perpetual fog and drizzle. For months a ray of sunshine seldom, if ever, reaches them. The region is utterly unfit for human habitation and intermittent and remittent fevers are the penalty paid for a temporary residence near them. Now, the fact so thoroughly established that plants are as frequently the victims of the parasitism of micro-organisms as are animals, placed beside the fact that their home is such an ideal one for micro-organisms, would naturally lead us to think that if these trees owe their immunity to some chemical secreted by them we should be able to discover it. Now let us add the further fact that quinine and these other alkaloids they secrete are powerful antiseptics, and do destroy just such germs either out of or within the body, and the conviction begins to grow upon us that something like a purpose is manifested in this arrangement. But on reasoning farther we learn more. These alkaloids are always found in the very part of the plant where the attack of the germs would be most likely to occur and when occurring would prove most injurious to the tree. Why is there not a good supply of these alkaloids in the wood or in the corky layer of the bark? Why are they in the very part of the bark where, *a priori*, we would expect them to do the most good? Now let us add another fact. The yield of these alkaloids is always greatest the greater the damage from such invasion. The season of maximum for fog and drizzle is the season of maximum yields of alkaloids and especially of quinine, the most powerful one.

PROPHYLACTIC MEASURES.

What is quite remarkable, too, in this

connection is the fact that the cinchona tree seems to have the power of anticipating the bacterial invasion by the very method that we would belikely to use in anticipating it. The increase of alkaloids evidently occurs prior to the invasion of the germs and following the advent of the conditions which make their invasion possible. The cutting off of their sunshine by fog is their signal for an increased supply of alkaloids and especially of quinine. In India, where cinchonas are now cultivated and where fogs are not so common, they cover the bark of the trees with cotton and shield them from direct sunlight to increase their production. The dark, warm and damp forests where heavy growths of pine abound would surely prove miasmatic but for the good office of the pines themselves. They load the air with germ destroying terpenes, the oxidation of which gives forth a rich supply of ozone. These vestiges of the primitive world tell us of their struggle against disease germs and survival by virtue of this protection.

THE MILL WILL NEVER GRIND WITH THE WATER THAT IS PAST.

It seems a rather singular fact that when plants or animals do not produce destructive agents by which to vanquish bacteria, they are sure, sooner or later, to bring into existence a product destructive to themselves. When we pause to think that "the mill will never grind with the water that is past," nor the fire burn with the carbon dioxide produced, we see it is a universal fact in nature. The germ that runs sugar down into alcohol soon perishes in that alcohol. Following it comes the vinegar germ, giving us acetic acid in sufficient abundance to stop its own activity. Next follow one by one other germs to carry the changes farther and farther down the hill, till in every instance they work their own destruction or at least cessation of activity. Each of these products, final to some definite species of germ, is an antiseptic to that germ and, therefore, a medicinal agent for the subjugation of that germ when it becomes pathogenic.

THE USES OF GERMS.

It took us a long time to learn that all our alcohol, wines and liquors were the products of germs. Even when "mother of vinegar" was handed from house to house and manufacturer to manufacturer they did not for centuries suspect that they were handling germs. Many druggists do not yet know that ergot is the product of a disease germ. It is only lately that we have discovered that we owe our nitric acid, saltpetre, sweet spirit of nitre and all our nitrates and nitrites to the useful labors of humble bacteria. Much of our ammonia, some of our benzoic, hippuric and butyric acid we owe to their kind offices.

MICROSCOPIC CHEMISTS.

As our knowledge of micro-organisms widens our respect for their pharmaceutical and chemical skill increases. Within a year Dr. Carl Wehmer has reported the fact that he has isolated a species that converts sugar into citric acid so that 11 pounds of sugar will produce six pounds of the crystallized acid. The cost of such conversion is so trifling that it is scarcely worth considering. A discovery like this will work little short of a revolution. Sugar is cheap and the acid is bound soon to be sold for little if any more than the price of the cheapest sugar. Of course we will have to wait till the patents run out for such a consummation. When we

pause to consider the fact that in the plant world the cells build up the countless numbers of organic compounds from simple carbonic acid, water and nitrogen compounds, and when we further consider that the bacteria are isolated cells capable of duplicating much of or all such work we can gain some idea of the possibilities that lie before us. We have to supply them with the raw material for their food and without money and without price they will do the rest. We only need to isolate the special kinds in relatively pure cultures and set them to work.

INDUSTRIAL MICRO-ORGANISMS.

When mixed, one kind undoes the work of another, so that no useful results occur. Prof. Conn of Wesleyan University has lately isolated the special bacterium that produces the essential ether to which is due the rich flavor of our highest quality of butter. Following his directions the butter maker can now at will produce a ripened cream possessing the highest, richest aroma of prime butter. If we have successfully produced one such product who can say where the end is? The highly prized aromas of wines and liquors, the rich flavors of fruits and flowers may all be within our power to produce in the same manner. If we can call these pigmy workers to our aid in making alcohol, acetic and citric acid, why not other acids, other alcohols and other organic compounds? We have found that through the magic of their power certain leguminous plants are able to draw from the atmospheric nitrogen their necessary supplies of that refractory gas. May we not utilize their services in a similar manner? Will not our pharmaceutical chemists of the future supply these same bacteria with what the leguminous plants provide them and on a vast scale procure our nitrates, nitrites, ammonia and ammonium compounds, at the same time giving to the farmers all they need to enrich the soil of their farms? All the rich mines of Golconda never contained such wealth as is promised in this direction.

Man first learned of the winds as his foes but soon he harnessed them and they became his friends. At a later date he gained power over fire and in the conquest found he had a mighty agent to do his bidding. Still later and the lightning that he so long dreaded as the bolts of heaven, came within his grasp and we are beginning to realize the majesty of such a victory. Now he has just begun his conquest of the most direct force he has ever had to fight—the microbes—and if our vision is not distorted he will find here a power second to none of the rest in the benefits it can bestow upon him.

The Oldest Medical Prescription.

The oldest medical prescription in existence bears date of 4000 B. C. It was discovered in an Egyptian tomb, written on papyrus, and has been deciphered by an English professor.

It bears evidence that it was intended for some bald-headed Egyptian, and reads as follows:

	Paris.
Dog's paw (calloused part).....	1
Dates.....	1
Donkey's hoofs.....	1

Boil the whole in oil and rub the scalp actively with the mixture.

Egyptian history does not say whether or not the patient regained his lost hair.

On Certain Criticisms and the Capacity of Applicants.

Answers to Queries 10, 11, and 21.

By H. M. WHITNEY,
Lawrence, Mass.

My first thought after carefully reading the list of twenty-three queries, was of the criticism made on American Pharmacy by a writer who attended our last meeting in Chicago, and who, it seems to me, could justly have been answered as the following clipping from the *Boston Commonwealth* of May 19th treats other English writers, and I certainly have no desire to offer opinions upon subjects which will, and should properly, be decided by each college and locality, as the conditions and circumstances demand:

"The attitude of the English reviews toward the Coxey movement has been rather entertaining. That amiable old thing, the *Saturday Review*, bothered her dear fussy head a good deal, because, owing to the general unreliability of American newspapers, she could not feel sure that the army really did capture a train out West. That would have been nice, if she could only have credited it; so American! The *Spectator*, on the other hand, was sour and serious. It was sure that, by the beginning of May, lots of loafers would be collected in Washington, a menace to the government. It admitted that the government would win the day, and probably without bloodshed. "But even if no calamity shocks the Union and humanity," it said, "what a scene to have occurred in the capital of the richest nation in the world, and the one which most consistently boasts that it has solved the problem of the future!" It is a pity that all the advice the *Spectator* gave to help Congress get rid of that unruly army—50,000 was the *Spectator's* estimate of the probable number of the Unclean—should have been useless. May the *Spectator* not be discouraged merely because it has usually failed to understand conditions over here. May it go right on talking about us. Its comments and the *Review's* comments on things American, contribute to those things a seasoning of joyousness, that were it not for the criticisms, they might not possess."

Upon Queries 10, 11 and 21 I have opinions or convictions as a result of nine years' service upon a Board of Pharmacy, but my opportunities and environments may have been exceptional, and, in expressing my views, I disclaim any reflection upon those who have had less, larger or more varied experience, and who have as honestly arrived at entirely different conclusions.

ROUGH ON GRADUATES IN PHARMACY.

Q. 10. Should graduates in pharmacy be compelled to pass the examinations of boards of pharmacy before being registered?

Boards of Pharmacy, as I understand it, are not created to examine *professors* or *experts* in chemistry, botany, materia medica, toxicology or posology, but to determine whether or not the applicant for registration is an all-around practical pharmacist, sufficiently posted and familiar with drugs, their preparations and use, to be a help, a sort of beacon

light to guard and guide, rather than a dense, ponderous fog to envelop and confuse the people by lofty and unintelligible jargon.

In some of the States the law requires examination in every case before registering.

I recall one case of a recent graduate in pharmacy who has been before the board four times and failed.

Another, from one of the oldest and best colleges of pharmacy in this country, whose answers were given with assurance and confidence;

What is petrolatum? Ans. Crude carbolic acid. Two are official, crude and purified. If petrolatum was ordered, should put up the crude carbolic acid.

One drachm of iodine will dissolve in one ounce of water all right. Lugol's solution is solution of iodine and arsenic—correcting himself, said iodine and mercury.

Alcohol and water have same number of drops in a fluid drachm.

Would give as a large dose of tinct. aconite five drops or ten minims.

Another graduate, but not in the United States, says there are 430 grains in a troy ounce and 440 in an avoirdupois ounce. One ounce of boiling water will dissolve one drachm of iodine. Proto-iodide of mercury is the red iodide. Don't know the deuto. Proto-chloride of mercury is the bi-chloride.

These are, of course, exceptional cases but are cited to show that all graduates in pharmacy are not of necessity and in fact practical pharmacists.

My answer to query 10 is, they should.

Q. 11. What principles should guide Boards of Pharmacy in framing their examination questions?

The guiding principle should be as nearly as possible absolute justice. 1st. To the people whom the board serve. 2d. To the applicant who is qualified, as well as to the one who is not. 3d. To the employer, who has the right to expect a safe and competent person. 4th. To the board, whose action, if not just and creditable to itself is a snare and delusion to others.

A PRACTICAL VIEW.

The important point is: Has the applicant knowledge, skill, experience and capacity to meet the exigencies and emergencies daily and hourly presented, with general information and comprehension of his responsibilities now demanded and expected by the people? Parrot pharmacists may answer for floor walkers, tritrate and nostrum peddlers to some physicians and grocers, but are not the compounders and dispensers in a pharmacy, which the general public and honest educated physicians have a right to expect, or an honest Board of Pharmacy indorse.

PUBLICATION OF QUESTIONS.

Q. 21. Should Boards of Pharmacy publish from time to time, in the pharmaceutical press, their past examination questions, as a guide to future candidates of the nature of the subjects upon which they are expected to pass?

If Boards of Pharmacy are to be rated as institutions for learning, and it is desirable to encourage quiz books, and discourage general culture and colleges of pharmacy, aid and assist those whose only aim and purpose is to acquire just enough learning to secure the coveted parchment and ten or fifteen dollars a

week from some department store or saloon druggist, then yes. But if Boards of Pharmacy are established to protect the people from fraud, ignorance and mere pretenders, and elevate and dignify the calling, then no, a thousand times no!

Soon after mailing my letter of the 22d to you, a letter was received at this office, and I send you a *verbatim* copy to add to my previous letter, if you desire. The writer is no chicken, having been a crower for fifty years, and claims to have had fifteen years' experience as a physician and four and a half years' experience as a pharmacist. He came before this Board for examination March 29th, 1894, with the following result; Oral o, written 12, drugs 10.

COPY OF LETTER—AN APPEAL FOR THE AFFIRMATIVE SIDE OF Q. 21.

"May 22, 1894,

"* * * MAINE.

"DEAR SIR: Will you please send me some copies of former questions in pharmacy? It occurs to me that they may furnish me with an idea as to how examinations are conducted. The study of Remington seems almost endless to me, and I want to acquire the most useful portions and such as the Board would expect me to know.

"I am putting in my time as well as I can in an ordinarily busy drug store, hoping to feel safe enough to present myself sometime in the autumn.

"Yrs. truly,

This is not an unusual request, we receive many of them every year; but coming at *this time*, it seemed so appropriate a conclusion that it is sent for your consideration, approval or rejection.

Bitter Principle of the Barberry.

The intense yellow color so generally characteristic of the tissues of *Berberidaceae*, depending, as is well known, upon the presence of the bitter alkaloid *berberine* ($C_{20}H_{21}NO_4$), occurs also to some extent in the related families. Hence the structural evidences of consanguinity gain something of confirmation in the fact that we find the same substance which renders various species of *Berberis* useful for medicinal and tinctorial purposes imparting its tonic properties and intense yellow to the "gold-thread" (*Coptis*) and "yellow-root" (*Xanthorrhiza*) among *Ranunculaceae*, and the "calumba root" (*Jateorrhiza*) of *Menispermaceae*.

In the old days of belief in "signatures," this yellowness of the barberry's tissues was taken as a sure indication that here must be a sovereign remedy for jaundice, and accordingly a decoction of the bark was in high repute as a specific for that disease. While this notion has, of course, long been banished to the limbo of imaginary medicine, yet, in the modern practice, decoctions, infusions, and the fluid extract of barberry bark, as well as the isolated alkaloid berberine, have a recognized tonic value. It is an aqueous extract prepared in India from the sliced roots and branches of the so-called "ophthalmic barberry" (*Berberis lycium*), and other Himalayan species, which constitutes the highly valued "rusot."

Considered from the plant's standpoint, this bitter principle, so abundantly present in its outer tissues, is doubtless to be regarded as a defence against gnawing animals, and as such, accessory to the spines.

AMERICAN PHARMACEUTICAL ASSOCIATION

REPORT OF THE PROCEEDINGS.

THE forty-second annual meeting of the American Pharmaceutical Association was convened in Asheville, September 8, at 8 p.m., by President Patch, of Boston, who introduced Mayor Patton, of Asheville.

Mayor Patton welcomed the Association to Asheville on behalf of both the Carolinas, and stated that it was appropriate that the Association should have chosen North Carolina as the place of this meeting, on account of the fact that in this State a larger number of medicinal plants were found than in any other State in the Union.

Vice-President Leo Eliel responded to the Mayor on behalf of the A. P. A., stating that the Association was national in its ideas, knowing neither North nor South, East or West, and that in selecting this city for the place of meeting of the Association, it was done for the purpose of gathering information from this section of our great country.

Vice-President Eliel then took the chair, and the president read his annual address.

PRESIDENT'S ADDRESS.

BY EDGAR L. PATCH.

In reviewing the addresses of several past presidents I find it is customary to devote some time to commendation of the place of meeting, the local secretary and the committee of entertainment.

Permit me to depart from this custom and to merely remark that the beautiful panorama spread before us on every hand bears eloquent testimony to the goodness of God and the wisdom of your choice in selecting Asheville as a place of meeting; and allow me to suggest that a total absence of criticisms and a determined effort on the part of every one present to show appreciation of the labor bestowed to make our stay agreeable and profitable will be more appreciated by your local secretary and his associates than any words of mine.

It is also customary to ask for the shortcomings of your presiding officer the forbearance and indulgence of the Association.

This I will not do. Find all the fault you wish with my incapacity and my failure to meet your expectations, but bear in mind that in so doing you are criticising your own lack of good judgment in selection and learn to do more wisely in the future.

I lay no claim to ability as an orator, writer or parliamentarian, but will do the best I can to discharge the duties of the office I find myself in, thanking you for your generous estimate that permitted you to place me here and expressing my appreciation to all members who have so willingly extended their help to make the year a successful one.

THE APPOINTMENT OF A PERMANENT SECRETARY.

Very soon after my election I was called upon to appoint a temporary successor to our late lamented permanent secretary, Professor Maisch, who departed this life September 10, 1893.

Holding this position for years without a rival, and securing to our Association the honor and prestige of his useful and successful career, his loss seemed irreparable.

I was informed by several that it was my official duty to at once appoint a successor, but the step appeared too important a one to take without counsel and advice, hence I brought the matter to the attention of the Council. Sentiment seemed to be about evenly divided between Prof. Whelpley, Prof. Caspari and Prof. Remington, and several votes were necessary to secure a choice.

Professor Remington was selected, and consenting to serve, has given to the office the care and attention it merits, and we believe the Association has no reason to discredit the appointment.

CHAIRMAN OF THE TRANSPORTATION COMMITTEE.

Very late in the season Mr. Main resigned as chairman of the transportation committee. As the committee was appointed by the Council it seemed fitting that the resignation should be acted upon by that body, and I referred the matter, through the secretary, Mr. Kennedy.

He considered it incumbent upon me to act without consulting the Council, and the time being at hand requiring the action of the committee, and the circular of the local secretary being held for the announcement of the committee on transportation, at the suggestion of the retiring chairman I appointed Caswell A. Mayo of New York, to succeed him.

MEMBERSHIP COMMITTEE.

In accordance with the vote passed at the Chicago meeting, instructing the president to appoint a special membership committee, to consist of one member from each State and Territory and one each from the District of Columbia and the Provinces of Nova Scotia, Ontario and Quebec, correspondence was at once opened with representative members in each of the sections referred to, and after the delay incident to securing acceptance, appointing substitutes, etc., we were able to announce the committee as complete, excepting representatives for the sections of North Dakota and South Carolina.

Failing to secure acceptance of the appointments for those districts after much effort, it was thought best to report the committee as constituted, that the work of organizing and canvassing might be prosecuted without further hindrance.

The names of the special membership committee and an account of their work will appear in the report of the chairman of the membership committee of the Council, Prof. Caspari, Jr.

Enough for me to say that applications have been received from a large number of druggists scattered all over the United States and Canada, thus widely extending the usefulness of our Association.

It is considered to be the duty of the president to present with his annual report a resume of matters of practical import that have transpired during the interval between the meetings, and to offer such suggestions for the furtherance of the usefulness of this Association as may occur to him.

NEW REMEDIES.

An attempt to name the new antis, the -anes and the -ines that have sprung Minerva-like from the synthetical laboratory or from the office of the clever manipulator each twenty-four hours since our last meeting seems out of place, in view of the enterprise of our trade journals, and the careful sifting to be given them by our reporter on the Progress of Pharmacy.

THE NEW PHARMACOPOEIA.

The exhaustive and able review of the last edition of the United States Pharmacopoeia, presented at our last meeting by my predecessor, leaves little to be said in that direction.

The book has been open to criticism for a year, and it would be strange indeed if some defects and faults could not be found, but I believe every unprejudiced mind must see in it a work of rare excellence as practical in character as could be expected, and far enough in advance of the general pharmacist to prove an educator of the highest value.

Should any pharmacist or assistant undertake the systematic comparison of his products with the detailed description furnished him, he would soon of necessity acquire a fund of information concerning pharmacy, chemistry and botany that would largely increase his appreciation of the book, his own self-respect, and his value to the community at large.

MR. KRAEMER'S REPORT.

Our last volume of Proceedings, in the character of original papers presented, the Report on the Progress of Pharmacy, including the abstract of the scientific papers presented to the various

State associations, the alphabetical list of new remedies, the index to papers and publications of interest appearing at home and abroad, equals its predecessors; is worthy the highest position as a valuable work of reference, and should be at the disposal of every progressive pharmacist in our country.

The present volume possesses unusual interest. It is a story of the life and achievements of our late honored permanent secretary, Prof. Malsch, illustrating the possibilities of American pharmacy and the attainments to be reached by one who persistently, with singleness of purpose pursues a high ideal, should be an inspiration to many young men at the threshold of their careers.

In addition, the Proceedings of 1893 bear witness to the presence among us, at our last meeting, of distinguished pharmacists from abroad, and in the addresses and discussions of Messrs. Cartelghe, Martindale, Martin, and others, we find much that is helpful and interesting.

ON FOREIGN CRITICISM.

Every honest seeker after improvement has courage to occasionally pray with Burns,

"O wad some power the giftie gie us,
To see oursel's as ithers see us."

and in the pleasant criticisms of our method of conducting business and of the wide latitude we allow to irrelevant debate which some of us heard at Chicago, this prayer was partially answered, while in the report of N. H. Martin to the Pharmaceutical Society of Great Britain we are permitted to see a profile of American Pharmacy cut with all the precision of the scissors artist who does "one in black while he waits."

Such efforts may be measured by the size of the cardboard and not considered true to nature by the subject; nevertheless there are dim points of resemblance that permit recognition by impartial and observing friends.

Some of the peculiarities or defects might be largely modified by a full face view, but the most patriotic would be remiss if they professed satisfaction with the best portrait a camera could produce.

We are quite aware that there is unlimited field for improvement in pharmacy here as in Great Britain, and are not surprised that our defects should be manifest to an interested and critical observer from abroad. Nevertheless it affords any of us who have an active interest in pharmaceutical education the deepest satisfaction to observe the great improvement in the quantity and quality of education offered to the American pharmacist, and to predict that our vantage ground is so well fortified and maintained that future progress must be much more rapid.

In my own experience, entering pharmacy as a stepping-stone to the study of medicine, and matriculating at a college of pharmacy, I was much disappointed at the superficial character of the instruction in materia-medica, botany and theoretical chemistry and pharmacy, each year being a practical repetition of the previous course, while no opportunity was given for a moiety of laboratory experience.

MR. MARTIN SADLY MISTAKEN.

But our friend Mr. Martin, is sadly mistaken when he assumes that this is

the state of affairs to-day. Of the thirty-six pharmacy schools one only is in this condition.

In the brief time since my graduation the particular college referred to has come to be the possessor of a building and laboratories valued at over \$100,000, its facilities for practical instruction are very extensive and elaborate; its course carefully graded, and its instruction largely consists of laboratory work. It more than fulfils the ideal of the most hopeful dreamer of twenty years ago, although he may to-day be as unsatisfied as he was then, the possibilities of the future being so much greater.

And what is true of this institution is true of many of the schools of pharmacy of our country. Boston, New York, Philadelphia, Baltimore, Chicago, Buffalo, St. Louis, Toronto, and many other American cities have erected costly buildings and equipped departments for practical work in manufacturing and dispensing pharmacy, general chemistry, analytical chemistry and micro-

one refreshing oasis in our sea of "educational chaos."

But no man, no community, no nation can live long on past achievements or develop by idle dreaming. The cost of having done well is a necessity for doing much better.

And as the mightiest construction is only as strong as its weakest points, these must be sought for and assiduously built against before enlarging the area or embellishing the superstructure.

ADVANCE OF EDUCATION.

Medical colleges have adopted graded courses, extended the term from two to three or more years, broadened and deepened the lines of instruction and hedged about admission with entrance examinations that would exclude fifty per cent. of the students of twenty years ago.

Compare some of our medical schools with forty to fifty professors and instructors and a four years' graded course of seven months each, with those of forty or fifty years ago, when seven professors gave the same instructions each successive term of twenty weeks only, and attendance upon two such courses was all that was required.

Yet no one assumes that the medical training is ideally perfect and incapable of extensive improvement.

Judging from our foreign exchanges there are plague spots to be cut from the pharmaceutical body abroad, but that does not concern us, our attention should be given to search for the philosopher's stone, to turn our dross and base metal to gold.

That there is much needing transmutation is apparent to the most careless reader of the medical and pharmaceutical journals.

PRESCRIBING PHARMACISTS.

Medical men are found declaiming against prescribing pharmacists and mere sellers of nostrums, and are advocating in public the desirability of dispensing their own remedies on the ground of self-defence against the popularity of homeopathy that saves the patient a medicine bill, against the unwarranted repetition of the prescription or the transfer to another, and against the scrutiny of their treatment by the examination of their prescription, or, that they may retain the profit which they now divide with the pharmacist.

Conjointly with this you may observe other earnest, progressive physicians who have no time to devote to the consideration of such selfish trifles, but are wholly occupied with the important duties of their noble profession and considering the broad questions of national supervision of the public health; the improvement of the sanitary conditions of our cities and towns, and the establishment of such regulations for isolation and inspection as shall prevent all epidemics and largely do away with the need of medication.

DISPENSING PHYSICIANS.

In our own ranks, hours of talk and reams of paper have been given to airing the grievances of dispensing by physicians, the encroachment of large manufacturing houses, the rivalry of department stores and the grocer pharmacist, the annoyance of the bar sailing under a drug license, and retailing by wholesalers.



Professor Edgar L. Patch.

Retiring President of the Association.

copy, that a few years since would have been deemed impossibilities.

In this brief time the facilities for pharmaceutical instruction must have appreciated from a few hundreds of thousands to two millions or more in value.

TWENTY-THREE PHARMACEUTICAL JOURNALS IN FOURTEEN YEARS (sic)

When we consider that the last fourteen years have witnessed the establishment of twenty-three pharmaceutical journals, the enactment of thirty-seven of our forty-six pharmacy laws, and the inauguration of instruction in pharmacy in more than twenty-five of our universities and independent schools of pharmacy, we should be unwise to expect the solidity and adjustment of an old and conservative community, although we believe a little more accurate knowledge would have convinced our friendly critic that we have more than

Yet some are still found who accept the situation as an inevitable product of our social condition, and pursue their onward course, perfecting processes, enlarging their fund of knowledge and striving after a faithful performance of the duties of their calling.

THE INCREASE OF DRUG STORES.

They recognize that in place of half a score of manufacturing pharmacists and chemists and a few hundred manufacturers of nostrums, we now have nearly six thousand of the two combined, that the number of stores has constantly increased until we now have one to every eighteen hundred and sixty of the population in the entire country, and one to eight hundred and fifty in some of our older sections.

Place this against 1 to 2,800 in Italy, 1 to 5,800 in France, 1 to 5,500 in Switzerland, and 1 to 10,300 in Germany, and we see the necessity for the struggle for maintenance and the cause of the artificial cultivation of the medicine craze, encouraging the consumption of drugs and remedies that oftener outrage than assist nature.

A REDUCTION NEEDED.

There is no doubt about one-third the number of drug stores and one-sixth the number of physicians would be a greater benefit to the public health than the number we have, could we wisely differentiate. * * *

AN OBSERVATION SHEET.

It occurred to me that this Association might publish "An Observation Sheet." This should be arranged so that any difficulty in practice or any peculiarity in experience could be at once made note of, and a copy of the completed sheet forwarded to the chairman of our Scientific Section for comment and presentation at our next meeting. * * * These observation sheets might be mailed with the minutes of the meeting to each member, with a request to use them.

The object of this sheet is to encourage members to make note of all experiences in dispensing, manufacturing, testing and selling that might otherwise be forgotten. Preserved they would be of value for future reference and published they would be of great assistance to the profession at large.

Will you kindly make use of these sheets and send a duplicate of all filled out to the chairman of the Scientific Section.

THE PRESCRIPTION.

- 1.—A prescription received calling for therapeutic incompatibles (medicaments opposed to each other in action).
- 2.—A prescription received calling for chemical incompatibles. (A precipitate, *a*; change of color, *b*; effervescence, *c*; caused by chemical action).
- 3.—Physical incompatibles. (A precipitate owing to change in character of solvent, *a*; a separation, *b*).
- 4.—A difficult pill mass. 5.—An unsatisfactory ointment. 6.—An excessive dose. 7.—Dangerous abbreviation. 8.—Peculiar composition. Copy of recipe attached. How the trouble was treated and result.

THE STORE.

- 1.—New remedies called for during the month and times employed.
- 2.—Obsolete, unmarketable or peculiar products called for.

THE LABORATORY.

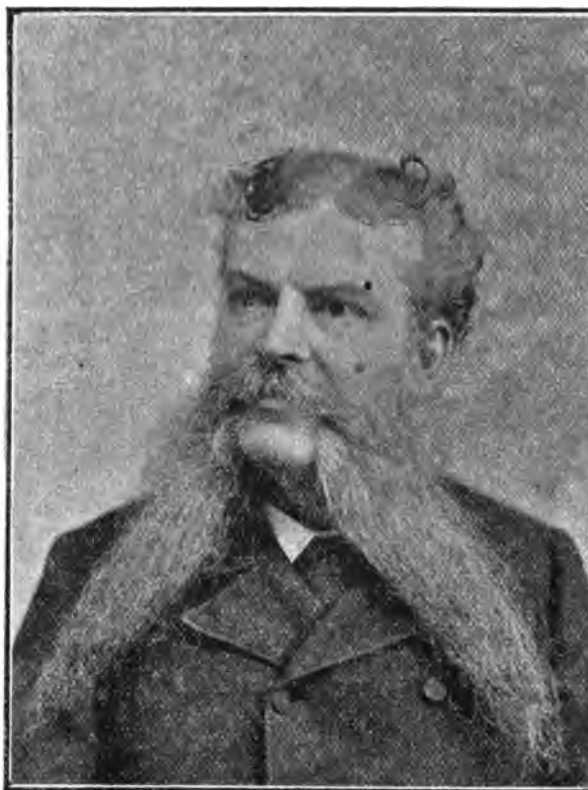
A

Experienced difficulty in securing satisfactory products in using U. S. P. (a), Nat. Form. (b), published in formula for

- 1.—Fluid extract of
- 2.—Tincture of
- 3.—Syrup of
- 4.—Elixir of
- 5.—Plaster of
- 6.—Ointment of
- 7.—Extract of

PRESIDENTIAL RECOMMENDATIONS.

First, I recommend that the establishment of a National Pharmacy Commission and the enactment of a National Pharmacy Law, securing as far as



William Simpson.

President of the Association.

William Simpson was born in the city of New York in 1839 and removed to Richmond in his early childhood, where he received an academic education. At the age of seventeen Mr. Simpson entered the drug business and completed his apprenticeship under the tutelage of Wetherell Peterson, of Richmond. In 1860 Mr. Simpson married and in the following year moved to North Carolina, where he entered the confederate service and was assigned to duty as ward master in the military hospital at Raleigh. At the close of hostilities Mr. Simpson resumed the drug business, going into business on his own account in Raleigh where he has since resided. He joined the American Pharmaceutical Association in 1873 and has been a frequent attendant at the meetings and was elected vice-president at the Saratoga meeting; represented the association in the Pharmacopoeial Convention in Washington in 1890.

Mr. Simpson was one of the organizers of the North Carolina Pharmaceutical Association and was the third president of that body, and has been an occasional contributor to its proceedings.

tributor to its proceedings.

He was largely instrumental in securing the enactment of a pharmacy law for the State and has been secretary of the Board of Pharmacy ever since its establishment in 1881.

Mr. Simpson is the instructor in pharmacy in the pharmacy school of Shaw University in Raleigh.

In the Masonic fraternity Mr. Simpson has been honored with many offices of trust and is at present the treasurer of the Grand Lodge, the Grand Chapter and the Grand Commandery of the State, being probably the only person in the United States acting in the same capacity for all three bodies.

The new president is a man of fine presence, elegant address and winning manners. His voice is low and his soft southern accent makes his speech sound rather strange to the New England members. He is a man of great personal magnetism and keenly appreciative of the good things of this life.

practicable, uniform methods of registration by practical examination, be referred to the Section on Education and Legislation, with a request that a bill be drafted and presented to the Association. * * *

Second, I recommend that the Sections on Education and Legislation and on scientific papers present to the Association an outline of a course of instruction in pharmacy, such as in their esti-

- 8.—
- 9.—
- 10.—Chemical product.
Character of trouble and how remedied.

B

- 1.—Noticed the following errors in the U. S. P. (a) Dispensatory (b), description of
- 2.—Had the following difficulty in applying the U. S. P. test for
- 3.—Found the following product had become unsalable from having changed as stated. Had been in stock for and was stored

mation it would be desirable for teaching Colleges to conform to as far as practicable. * * *

ADVOCATES A SCHOLARSHIP FUND.

Third, I recommend the establishment of an American Pharmaceutical

"A three-fold measure dwells in space,
Restless length, with flying race,
Stretching forward, never endeth,
Ever groundless, Depth descendeth.
Types in these thou dost possess,
Restless, onward thou must press,
Never halt nor languor know,
To the perfect wouldst thou go.



Professor Joseph P. Remington.
Retiring Secretary of the Association.

Association Scholarship Fund of fifteen hundred dollars annually, for the purpose of securing to suitable candidates the advantages of higher education in pharmacy. This sum to be raised by voluntary subscriptions or by appropriations from our treasury of one-half the sum and the solicitation of the balance from the various State Associations. (The qualifications for a candidate were then specified.)

I have trespassed severely upon your patience and I can only incidentally refer to the new edition of Remington's Pharmacy, the United States and National Dispensatories, "A Study in Pharmacy" coming from the pen of Prof. Lloyd, the promised new work on pharmacy by Prof. Caspari and that of Prof. Coblentz; to the practical interest displayed at the meeting of the International Pharmaceutical Congress, held last year at Chicago (the first meeting on American soil), and to many things yet undeveloped that are taking shape at the hands and in the minds of American Pharmacists to prove that the Genius of American Pharmacy is not idle; she is not wasting golden opportunities and being left behind in the race, she is not an out-rider or an indifferent passenger, but she drives the chariot of progress and like Jehu of old, rides furiously.

Let thy reach with Breadth extend,
Till the world it comprehend,
Dive into the depths to see,
Germ and root of all that be,
'Tis the progress gains the goal,
Ever widens more its bound;
In the full the clear is found,
And the truth,—dwell underground."

SCHILLER.

On motion, the president's address was received and referred to the following committee: Thomas F. Main, of New York; William Simpson, North Carolina; and L. E. Sayre, of Lawrence, Kan.

Secretary Kennedy reported upon the applications for membership, that 96 applications had been approved by the Council, and that he had been directed by the Council to present them to the Association for their action.

The Secretary then read the records of the Council, which, on motion of Mr. Ebert, were approved as read.

Mr. Ebert, of Chicago, then brought up the matter of the finances, stating that he was actually astonished at the expenditure that has gone on in the last few years, and that he had asked on several occasions whether the association could stand this expense. "Gentlemen," said he, "I speak feelingly because I have gone through two crises in this association, when we were nearly bankrupt, and it was done in the same manner, and it is time to call a halt when we get into a condition of this kind." Mr. Ebert deprecated the idea of paying the traveling ex-

penses of delegations, and thought that the time had come to call a halt in this matter.

A vote of thanks was extended to the Finance and Auditing Committees for their very valuable reports.

Mr. Sheppard stated that he feared the remarks of Mr. Ebert would be misunderstood. "I do not think we want people to understand," said Mr. Sheppard, that this association is bankrupt. The report of the Finance Committee was made at my suggestion because it has seemed to me, within the last two or three years, that I have seen a tendency to the overrunning of our expenses and a tendency to extravagance. From the statement as to what has been done in the past, it will be seen that this association is well-to-do financially as, much so now as it has been for several years past, but there has been a very strong leaning towards running into extravagant ideas in reference to expenses in this past year. I therefore feel it incumbent upon me, to call the attention of the Chairman of the Finance Committee to that fact and I have done so. I have asked him to look into the finances of the past year in order to see how the expenses were running up. He looked into the matter very thoroughly and he fully agreed with me, and I feel that we are only adopting the ordinary conservative policy and not in any way taking any back track, and do not feel that this imputation, if I may so call it, of Mr. Ebert, is a just one. As to the report of our finance committee as to the present condition of things, it is simply calling a halt in the movement which was getting a little too fast. We thought we were richer than we were, but we are not poor, but I believe in bringing our expenses inside of the limit of the receipts of annual dues, and I also believe that this is the only basis upon which this Association will attain financial strength, which it otherwise could not do, and that this is a point which has not been fully considered up to this time. When the report is made it will give the expenses for the year. There is one item of expense last year which was extraordinary, and that was in reference to the International Congress—an item of \$454—there was also another item of \$250 for the expenses of the committee on membership, which it is to be hoped, may bring a good return, and smaller items along the line. The general thought in reference to this whole matter being, that we must not feel that because we are pretty well to do, we can afford to be extravagant. That idea has been gaining ground within the last few years, and I am glad the matter has been brought up now."

Mr. Ebert, in reply to Mr. Sheppard, gave his reasons for making his statement. Mr. Sheppard in replying to Mr. Ebert's remarks, stated that he remembered very well his statement which was that this Association could afford to appropriate \$150 for prizes for scientific work. This statement he would now reiterate, because he believed that that being the prime object of the Association, if there was any saving to be effected, it should be done in the way of cutting off salaries, and not in cutting off scientific work.

Professor Remington, having been requested to make a statement with regard to the work of the Auditing Committee, said that he had had an insight during the past year greater than ever before as to the details of the work of the Association, particularly with regard to the Auditing

Committee, and that this work was done with the most painstaking care.

The next business in order was the presentation of the reports of the various committees.

The following Nominating Committee was then announced :

Alabama, P. C. Candidus and Chas. Mohr; Arizona, C. L. Eshman; Arkansas, Dr. Anderson; Colorado, A. W. Scott, C. M. Ford; District Columbia, W. S. Thompson, A. M. Reid; Delaware, John M. Harvey; Florida, S. P. Watson; Georgia, John Ingalls, G. F. Payne; Illinois, Geo. C. Bartels, A. E. Ebert; Indiana, J. N. Hurty, Frank Carter; Kansas, L. A. Sayre; Kentucky, C. L. Diehl, George A. Newman; Louisiana, F. E. Royer, J. A. Legendre; Maryland, Chas. E. Dohme, Wm. Simon; Massachusetts, W. M. Whitney, F. H. Butler; Michigan, Geo. McDonald, J. O. Schlotterbeck; Missouri, J. M. Good, H. M. Whelpley; New Jersey, Geo. W. Parisen, Wm. C. Alpers; New York, A. H. Mason, J. Pfeiffer; North Carolina, H. R. Horne, F. W. Hancock; Ohio, T. L. A. Greeve, Geo. Kauffmann; Pennsylvania, Wm. McIntire, E. C. Cornell; South Carolina, O. E. Thomas, H. Plater; Tennessee, R. W. Vickers, J. O. Burge; Texas, L. Myers Connors; Virginia, Col. T. Roberts Baker; Wisconsin, John A. Dadd; Canada, J. E. Morrison.

The President appointed the following five members as delegates at large on the Nominating Committee :

Wm. Gordon, of Cincinnati; A. K. Tilden, of Boston, Mass.; M. W. Alexander, of St. Louis; Dr. Casper, of Ohio; W. M. Simpson, of Raleigh, N. C.

As a committee on the time and place of the next meeting the President appointed the following gentlemen :

Chas. Dohme, of Baltimore, chairman; J. E. Morrison, of Montreal; Chas. M. Ford, of Denver, Col.; Jas. Good, of St. Louis; S. A. D. Shepherd, Boston.

Mr. Chearson behalf of the local secretary then made an announcement in regard to the entertainment of the members.

Prof. Fennell referring to the Constitution, Article 8, in reference to the election of officers, moved that the Nominating Committee nominate all the officers except permanent Secretary. This resolution was finally ruled out of order by the President.

R. G. Eccles of New York, being a member of the California State Association, his name was placed on the Nominating Committee, as representing that State.

Invitations to hold the next Annual Session of the A. P. A. were then read from the Pharmaceutical Association of the Province of Quebec, Montreal, from the Pharmaceutical Association of Denver, Col., from the Chamber of Commerce of Denver, Col., and from the Arkansas State Association to meet at Hot Springs, Ark.

The president announced the following Committee on Association prizes :

Henry Kraemer of New York; W. L. Scoville, of Massachusetts; C. S. N. Hallberg, of Chicago.

The report of the Committee on Membership was then read by Secretary Kennedy, detailing the efforts of the committee to get new members, and stating that 190 gentlemen had been recommended, and 138 had completed their membership by complying with the requirements, showing a good average increase in comparison with other years. This membership being credited to the 38 states, 2 territories, the District of Columbia, Canada and Central America, showing that nearly all parts of the country had contributed to the increase in the growth of the Association. Secretary Kennedy also announced the fact that 10,000 circulars had been printed and the same number of blank applications, and that they had been distributed through the states, but he was not able to say what the result was.

He stated that the number of members at the last report was 1,498, the number

added since last report, 124; the number received as delegates, 9; giving a total number, 1,626. There have been 58 losses of membership by resignations, 23 by death and 26 dropped from the roll for

various causes, making a total loss of 102.

The number of members in good standing at the date of this report was 1,534.

On motion the report was accepted and



Professor Chas. Caspari.

Secretary Elect of the Association.

The newly elected permanent secretary is a pharmacist by heredity as well as by choice and education, for his father, Charles Caspari, was a student under Woehler, and established himself in business as a pharmacist in Baltimore about the year 1842.

Charles Caspari the younger was born in 1852, and received his education at the University of Maryland School of Letters. At the age of fifteen young Caspari entered the store of Sharp & Dohme, who at that time conducted a retail and prescription pharmacy. In due course he attended lectures at and graduated from the Maryland College of Pharmacy in 1869.

Some two years later Chas. Caspari the elder dying, the son took charge of his store on Gay street, Baltimore. Owing to the deterioration of that neighborhood Mr. Caspari removed his store to the corner of Baltimore and Fremont streets, where he carried on the business of a prescription pharmacy up to about four years since, when he sold his store in order to devote all of his time to his professional and literary labors.

Some ten years ago Mr. Caspari was elected professor of pharmacy in the Maryland College of Pharmacy, a position which he still occupies with credit both to himself and the institution.

When Prof. Maisch's failing health showed him the need of aid in the revision of the National Dispensatory, he invited Prof. Caspari to assist him in the work, and after the death of Prof. Maisch the publishers tendered Prof. Caspari the editorship thus made vacant.

At the request of Messrs. Lea, Bro. & Co. he has also undertaken the preparation of a work on pharmacy, a preliminary notice of which appears on page 204 of this issue.

In 1891 Prof. Caspari, in conjunction with the other members of the faculty of the Maryland College of Pharmacy, founded the "Pharmaceutical Review," a magazine which at once took high rank in the scientific world, but which has since been discontinued on account of the practical difficulties encountered in its publication.

The secretary-elect has also been a frequent contributor to current pharmaceutical literature and to the Proceedings of the American Pharmaceutical Association. One of his later papers of importance was on volumetric analysis as applied to the assay of alkaloidal drugs, and was presented at the Chicago meeting of the Association. In this work Prof. Caspari was associated with Dr. Alfred R. L. Dohme, who has been his collaborator in several investigations.

Physically the new secretary is in decided contrast to his lamented predecessor, being below medium height and of rather spare habit. Mentally there are several points of resemblance, notably that of a most excellent memory for details and of marked independence of thought and conclusion. He is never a party man, recognizing neither friend nor enemy in the full discharge of every duty. His excellent memory for both facts and faces will prove of great value in the important post to which he has been selected.

For annual dues for the year '90.....	5.00
" " " " " " '91.....	55.00
" " " " " " '92.....	120.00
" " " " " " '93.....	3,995.00
" " " " " " '94.....	1,000.00
Total.....	\$6,075.00
For life membership fees.....	48.00
From the sale of the National Formulary..	289.54

Total receipts.....\$12,184.98
DISBURSEMENTS.

On the Membership Committee '93-'94.....	\$ 228.42
Proceedings.....	3,585.50
Stenographer.....	125.00
Journals for Reporter of the Progress of Pharmacy.....	25.44
Salaries.....	1,875.00
" for '93-'94.....	1,225.00
Traveling expenses.....	134.35
Section on Scientific Papers.....	24.07
" " Education.....	31.05
" " Commercial Interests.....	60.33
For transportation.....	63.04
For membership 1892 and 1893.....	17.00
" " 1893 and 1894.....	2,281.42
International Pharmacy Congress.....	4,541.67
Printing and stationery.....	161.40
Insurance.....	10.00
Miscellaneous.....	219.19
Badges.....	111.50
Blank certificates of membership.....	75.00
Total amount paid out.....	7,851.66
Paid into the life membership fund.....	48.00
Centennial Fund.....	50.00
International Formulary.....	143.31
Cash on hand July 1, 1894.....	4,091.67

Total.....\$12,184.98

Of the cash, \$785.73 belongs to the account of the committee on arrangements as per the following statement:

Cash on hand, Committee on Arrangements, July 1, 1893.....	\$ 781.31
Interest July 1, 1894.....	14.42

Total.....\$ 735.73

PROSPECTIVE ASSETS.

Not counting dues from members whose names will probably be dropped from the roll at the next annual meeting, and also those members whose residences are un- known, there is now standing on the books for annual dues for '93.....	590.00
Annual dues '94.....	4,765.00
Total.....	\$5,355.00

Mr. Eliel said that he had listened to the report very carefully, hoping that he would find a credit item for the use by the United States Dispensatory of the National Formulary.

THE NATIONAL FORMULARY FREE TO ALL.

Prof. Remington explained that the National Formulary was intended to be used by every druggist and every doctor in the United States and that there was, so far as he knew, no copyright giving the A. P. A. the exclusive right to the use of all the Formulary, which had been contributed by druggists from all over the United States freely. The intention was that the book should be used by every druggist in the country and every doctor. Before the National Formulary was incorporated with the United States Dispensatory, this fact was called to the attention of the members of the A. P. A., and the speaker was told to go ahead, and that he would receive the thanks of the druggists of the country, and of all the members of the A. P. A. for putting it into the United States Dispensatory.

Mr. Eliel stated that he was perfectly satisfied with Prof. Remington's explanation, his only thought being that an explanation was due to the members of the Association in the matter.

Professor Remington further remarked that if the A. P. A. desired any money consideration from the publishers of the United States Dispensatory, that he would answer for them and that they would be very glad to contribute.

WHY THE NATIONAL FORMULARY IS NOT POPULAR.

Mr. Hallberg thought that the reason why physicians did not utilize the

National Formulary to the extent that they might do, was owing to the fact that it was not presented to them for use, and if it could be incorporated in the Dispensatories it would be used, or in other medical works which would render its use more popular and much more attractive.

The report of the Treasurer was then approved and accepted. The report on the Progress of Pharmacy was then read by Mr. Kraemer of New York.

Mr. Hallberg moved that the report be adopted.

MR. EBERT CRITICISES THE REPORT.

Mr. Ebert addressed the meeting at this point on the necessity of improving the report in some particulars. He said:

"Now, in what I intend to say, gentlemen, I do not wish to convey the idea that there is any personality or any feeling in relation to this report, but at our last meeting your reporter asked for criticisms of his report and some discussion as to the arrangement of it. Since coming to this meeting I have conferred with him and notified him that I intended to criticize his report. In doing so I desire to call attention to what I consider an unnecessary expense. I refer to the great number of citations. This does not give me any information, and if I should desire to look the matter up, I do not possess the books of reference. Very few members of the A. P. A. do possess them, and it strikes me that they are of no practical value to the druggists, who comprise a majority of the membership of this association. There can be no doubt that it is valuable to teachers and manufacturers."

Mr. Ebert also objected to the insertion of the obituary notices and did not think it was necessary at all in this report. Otherwise the report was in his opinion one of the most valuable publications in the English language, especially in this country.

Mr. Sayre said that he would like to emphasize the last remarks of Mr. Ebert, but would at the same time call attention to what seemed to be an error in his remarks. "It seems to me," Mr. Sayre said, "that this association is not a selfish one, and while we are helping ourselves we are looking to the improvement of professors and editors or whoever is engaged in the field of pharmaceutical work. Many members do not even care to look over these pages, but there are a great number of persons, manufacturers, teachers and editors, who do, and I claim that all this work will help the cause of pharmacy."

MR. KRAEMER DEFENDS HIS REPORT.

Mr. Kraemer defended the report and made an explanation in regard to the same, stating that he was educated in a drug store and that before beginning on this report he had given the matter a great deal of thought, examined the pharmaceutical papers, the year books of pharmacy and former proceedings. "The real object of the work," he said "is an object lesson to you. You will notice that where there are subjects relating to pharmacy attention is called to the new remedies, and where matters of importance in relation to pharmacists occurs, I have endeavored to give all that was connected with it in a satisfactory abstract. I do not think it just that Mr. Ebert should wait until this late day to make his objections; I think it is unjust. I have done the best that could be done, and will always do all in my power to make a

thorough report. As to Mr. Ebert's criticism, I do not know whether I shall regard it or not. I only make this explanation in justice to the Association."

Prof. Remington said he had been very closely associated with the reporter in preparing last year's report, and he felt that it would not be right to keep his seat and not make a few remarks. He was familiar with the industry of the Reporter on the Progress of Pharmacy, and knew the time he had put upon the compilation of the report. He was also familiar with the criticisms which have been made upon the proceedings in former years, and took a special interest in the proceedings of this year. No report has ever been published as far as he knew in the proceedings of the Association that has been so universally commended. With regard to the minor criticisms that have been made, he thought it was perfectly right for Mr. Ebert to point in what particulars the report does not suit him, but other members want that information, and as Prof. Sayre has said, it is important to have it.

Prof. Whippley said that there was no doubt but that the Report on the Progress of Pharmacy was the most valuable work that the A. P. A. is accomplishing, and that being the case we should all admire the example set by Mr. Ebert, who was the first to openly criticize the report. He thought that each one should follow this example whenever they have an opportunity; but on the other hand he considered the Association is to be congratulated in having a reporter on the Progress of Pharmacy, who will get up and say "as long as I am reporter, that report will have individuality. Make your criticisms, I will consider them, and will do what I think is best." What kind of a report would we have if each person was the reporter—if each one should make criticisms and the criticisms should be followed, that's the way I look at it. Let each one criticize, and let the reporter decide. It is the same thing with regard to the daily papers. What kind of a daily paper would we have if each one of us had our say—so in editing—it is the same thing with this report. Now as Mr. Ebert has referred to those citations—his criticism was that the reporter had not given us sufficient information, and had not done sufficient work.

Mr. Hallberg stated that he had been trying to get the floor for the last half hour, and felt that the members had a right to express themselves in regard to the report. Mr. Hallberg agreed with Mr. Ebert in regard to his criticisms on collating the editorial expressions from drug journals. As to obituary notices, added Mr. Hallberg, Article 3, Chapter 3, prescribes that this shall be done by the reporter. This is one of his labors—he has got to do it if he desires to fill the bill. He deemed the enumeration of the subjects brought before the State Association every year a most valuable collection in the report, reflecting upon the progress of science, and thought that if this is to be extended, no matter how briefly, it is going to increase the size of the volume very much.

The question being upon the adoption of the report, it was agreed to.

Mr. Hallberg referred to Chapter 5, Article 2, in reference to the exchange of publications for the report of the Association, and stated that the Association, being now 42 years of age, ought to have a vast library, and that it was pretty near time to begin to preserve these publications for the future.

Prof. Fennel then made the report of the

Committee on Credentials, which on motion was accepted.

Mr. Whelpley moved and it was adopted that the A. P. A. inform all pharmaceutical journals and pharmaceutical organizations and other scientific bodies relating to pharmacy that their publications and proceedings would be very acceptable to our Reporter on the Progress of Pharmacy.

The report of the Committee on the National Formulary was read by Mr. Diehl.

Prof. Remington moved in view of the very important character of this report, the appointment of a committee of three to consider the report and to report upon it in order that it might be discussed, which was agreed to.

On motion of Mr. Pfeiffer the thanks of the A. P. A. was extended to the Committee on National Formulary for the able contribution to the welfare of the retail druggists.

The President then appointed Prof. Good, W. C. Alpers and E. A. Cornell, a committee to consider the report.

THE EXAMINATION OF NOSTRUMS.

Mr. Alexander announced that at the 45th annual meeting of the American Medical Association recently held in San Francisco, in June, 1894, the following resolutions were unanimously adopted:

Resolved, That the A. P. A. be invited to contribute to the Journal of the A. M. A. reports of the examination of proprietary and secret nostrums made under its direction to the officer of the section on materia-medica and pharmacy, and act with a committee to be appointed by the A. P. A. as a committee of conference, in order to carry this resolution into effect.

He moved that the resolution be referred to the Committee on National Formulary.

Mr. Ebert asked whether it would not be better to refer the subject to the special committee, who would bring up the subject and give more information in relation to it.

Mr. Alexander accepted the suggestion of Mr. Ebert, and the question being on the motion of Mr. Alexander it was agreed to.

SUGGESTED ADDITION TO THE NATIONAL FORMULARY.

Mr. Ebert asked the committee whether it would be in order for them to accept and introduce into the National Formulary a preparation that was formerly official, and which gives pharmacists a great deal of trouble at the present time. He referred to zinc ointment, which he said was difficult to dispense officially, it containing too much zinc oxide. He asked if it would be proper to introduce into the National Formulary the old form, which always was satisfactory.

The president thought that the committee would entertain a suggestion of this character without the Association taking any action upon it.

The report of the delegates to the American Medical Association was then made by Prof. Remington.

Mr. Hallberg stated that he had a communication from the chairman of the section on state medicine of the A. M. A., which related to nearly this same question, and desired to know whether it would be desirable to bring it up at the present time or afterwards.

The President: Unless it is deemed otherwise, we had better dispose of this report. The report was then received.

A COMMUNICATION FROM THE A. M. A.

Mr. Hallberg said it was his intention to introduce this matter before the adoption of the report. The chairman of the

section on state medicine of the A. M. A., Dr. H. Montgomery, of Chicago, had requested him to present a statement of the action of the section on state medicine of the A. M. A., with reference to the possible enactment of legislation to regulate the sale of patent medicines and proprietary medicines. If the Association desires it will only take three minutes to read the communication.

A paper was presented to the section on state medicine in San Francisco by Samuel P. Defelt, M.D., of Michigan, formerly health commissioner. It was published in the *Journal of the American Medical Association* of August 25. The paper contains a very fair description of patent medicines, and the way in which the public is very frequently swindled by their use, and also how those who manufacture proprietary articles attempt to utilize the physician for the purpose of advertising their preparations directly and afterwards to the public. Of course I shall not read the whole article, but the section on state medicine appointed a committee, and the subject was discussed as to some method of procedure as to investigating the composition of the various proprietary medicines and what is the best method to be adopted to bring the matter before Congress.

The report of the chairman of the delegation to the Pan American Medical Congress was then read by Mr. Thompson, and on motion received and referred to the publication committee.

The report of the committee on the Revision of the Pharmacopœia was then read by Prof. Whelpley, chairman, and on motion of Mr. Sheppard the report was received and the recommendations taken up serialim.

REPORT OF THE COMMITTEE ON REVISION OF UNITED STATES PHARMACOPŒIA. BY H. M. WHELPLEY.

The unprecedented sale and almost universal adoption of the Seventh Decennial revision of the Pharmacopœia of the United States speaks more plainly than words of the success attained by the present revision committee.

This gratifying growth in the popularity and usefulness of our National Standard causes us to thirst for still greater success. The American Pharmaceutical Association has ever been ready to aid and abet the Revision Committee to the full extent of their ability. We have increased our membership fully thirty per cent since the call was made for the convention to elect the present Committee on Revision. With our growth in numbers we have added to our resources and enlarged our field of influence. Your committee most respectfully and earnestly recommend the following:—

1. That the American Pharmaceutical Association heartily approve of the Research Committee plan adopted by the United States Pharmacopœia Revision Committee.

2. What gives evidence of being a large and growing proportion of pharmacists and physicians favor the introduction in the United States Pharmacopœia of a list of the maximum doses of official remedies. The Arkansas Association of Pharmacists and the Missouri State Pharmaceutical Association have officially indorsed the proposition. We believe that the American Pharmaceutical Association should discuss the subject at this meeting.

3. The statistics of prescription files is the only true method of determining just what preparations, chemicals and drugs are prescribed by the physicians of this country. This information would be of great practical value in revising the United States Pharmacopœia. We suggest that the American Pharmaceutical Association urge the National United States Pharmacopœia Revision Committee to obtain reports from different sections of each State and Territory.

4. We urge that the American Pharmaceutical Association spare neither work nor money to contribute to the utility of the next revision of the United States Pharmacopœia in a manner becoming to this National Organization.

The first recommendation, that the A. P. A. heartily approves of the research committee's plan adopted by the U. S. P. committee, was adopted.

DOSEAGE AND THE PHARMACOPŒIA.

The second was in the form of a reso-

lution to the effect that it is the sense of the A. P. A. that the inclusion of the total maxim doses in the U. S. P. would be desirable.

This was amended to read, that it is desirable to introduce into the pharmacopœia a table of maximum doses of drugs.

Dr. Simon offered an amendment because he did not think that the pharmacopœia was a text book for teaching therapeutics. He said, "I am in favor of putting in a list of energetic drugs because this may aid and protect pharmacists."

Dr. Stewart said: "As a physician I have been investigating this subject and while there are objections to the introduction of the doses into the pharmacopœia, I would be in favor of it."

Thos. F. Main of New York thought that if a table of doses were introduced into the pharmacopœia it would increase the use of the book by the druggists of the country.

Prof. Remington stated that this subject had been coming up in the Pharmacopœal conventions for forty years, and had been voted down, as the doctors don't want it.

Prof. Whelpley: The doctors do want it.

Prof. Remington said the matter came up at the last convention, and the difficulty was to determine what the dose is—this depending so much upon the idiosyncrasy of the patient—there is always a difference among doctors; and the best writers on therapeutics cannot always define what an ordinary dose is.

Mr. Ebert hoped that the table of doses would not be introduced.

Mr. Good stated he was present at the last Pharmacopœal convention when the matter was brought up and disposed of by Dr. Chas. Rice on the lines mentioned by Mr. Ebert and Professor Remington, and the whole convention were convinced individually that it would not be advantageous to introduce the table of doses.

The question being on the adoption of the resolution, it was agreed to.

THE COLLECTION OF STATISTICS.

The third recommendation of the Committee relating to the compilation of statistics of prescription files for the determination of the proportion of articles and drugs prescribed by the physicians of the country, was after some discussion presented in an amended form as follows:

Section 3. Statistics of prescription files is the only true method of determining what preparations, chemicals and drugs are prescribed by the physicians of this country. This information will be of great practical value in revising the U. S. P. We urge the committee to obtain reports from the different sections of the states and territories.

Mr. Good:—That last section, as near as I can get at it, does not say to whom the report should be presented.

The President:—They shall be collected by your members and referred to the national committee.

Mr. Hallberg:—That's the way I wrote it, Mr. Chairman. Unfortunately the committee on the revision of the U. S. P. of the A. P. A., and the national committee were both exactly the same in title, and that is very confusing. Now the only way to distinguish between the two is to state this association committee on the revision of the U. S. P., as distinctive from the national committee on the revision of the U. S. P. Now the original resolutions which I read from provided for the sending of these reports to this committee of the A. P. A. on the revision of the pharmacopœia.

The President:—There was a misunderstanding; as originally written, it would

cover it as you have stated. Mr. Whelpley says it refers to the national committee and not to this committee—and you have again this ambiguity in that section.

Mr. Thompson said the work asked for was done by the revision committee of 1880 of their own volition. They had a tabulated form printed and circulated among pharmacists requesting this information, which the committee used. He said he had not the least doubt but that the committee would do the same thing again.

Prof. Remington: I would like to say in reference to this question that the pharmacopoeial committee are in funds, and in better funds than the A. P. A., and they are better able to do that, but I am satisfied, as Mr. Thompson says, that this work of collecting all these statistics will be thoroughly done this time, and they will get reports, and there will be means of doing it, and while I know the committee will not object to receiving any information the A. P. A. gives to it, I am satisfied it will be very much depleted by the work of the committee.

The President: With your permission I should divide this and ask you to act upon the recommendation expressed in the first section, that is, we suggest, etc.

On motion adopted.

The Second Section: "The committee on the report of the U. S. P. of the A. P. A. requests the various State associations to obtain collective reports or prescriptions in use in the various States, to present such reports in a tabulated form furnished by this committee to the committee on the revision of the U. S. P. of the A. P. A."

Mr. Good: I would not send out a request from this association for returns to be sent to that committee. If the request is from your committee they should go to this committee.

On motion of Mr. Thompson the motion just read was laid on the table.

The question being upon the adoption of the report as a whole, as amended, it was agreed to.

Mr. Sheppard: There is certain remaining business which can be taken care of, and that is the amendment of the by-laws referred to by council, as it seems unnecessary to read all that because, as I state, it is entirely of a routine character, and merely intended to incorporate in our by-laws the new committee appointed last year, and certain phraseology and such like, hardly worth while to read them or to discuss them; I move that they be adopted. This motion was seconded and agreed to.

TO REVISE THE CONSTITUTION.

Mr. Hallberg: I have a resolution in the hands of the secretary that I would like to call up, and one which I think will require no discussion whatever.

Resolved, That a committee of three be appointed to submit the constitution and by-laws of this association to a thorough revision, and to report a draft of such additions, changes, and corrections to the association at its meeting next year.

Mr. Thompson: I don't believe that it is a good plan to pursue. I think a much better method is to make these changes in the constitution as, the necessity for them arises, as, if we appoint a committee to revise the constitution they may come here with a great many changes in the constitution.

Mr. Sheppard: I think it is a capital idea to let these things come from council and have them look over the matter in detail first.

Mr. Thompson: Let us make them when needed.

Mr. Hallberg: In our constitution I can find you twenty or forty places which are never lived up to and which are certainly out of place and there are a great many grammatical errors, and there are so many places in it requiring change that we never in the world will get at it unless some method of this kind is pursued. I have a copy here marked in blue, showing dozens of places, some of them where one section contradicts another one—I do not believe you will ever get that rectified unless you have a committee carefully going over this whole subject, and reporting next year—they can report to council if necessary.

The President: Are you ready for the question?

Mr. Sheppard: I hope Prof. Hallberg will be appointed a committee of one on his own motion.

Prof. Hallberg: Article 3, chapter 8 says, the president, vice-president, shall be ex-officio members—that says vice-president in the singular—it does not say vice-presidents shall be ex-officio members of council. Now there are any number of errors of that kind, and we do not know what we are operating under half the time.

Mr. Thompson: If Mr. Hallberg will amend his motion so as to have it refer to grammatical errors only I shall be better pleased.

The President: The motion as I understand it now presented by Prof. Hallberg reads as follows:

Resolved, That a committee of one be appointed by the chair to subject the constitution and by-laws, etc., etc.

The question being on the motion of Mr. Hallberg it was agreed to.

TO CONTROL BOOK PROPERTY OF THE ASSOCIATION.

Prof. Fennell: In the discussion on the progress of pharmacy we ascertained certain literature which is the property of this association is in Philadelphia at present in charge of the permanent secretary, and members of this association are at liberty to look at those books and use them, but they must be used in the building. Now I want to offer a resolution that a committee of three be appointed to draft resolutions or laws governing the use of these books—to take them out in all parts of the United States by the members of this association.

This resolution was seconded and after a short discussion carried.

The President: How shall the committee be appointed?

Prof. Fennell: By the chair.

The President: The chair will reserve the appointment of this committee until a later date, but will appoint Prof. Hallberg a committee of one to consider the constitution and by-laws.

The association then adjourned till 3 P.M.

Afternoon Session.

The Association was called to order by the president, and the reading of the minutes of the last session of council took place and the minutes were approved. The convention then adjourned until 9 Wednesday morning.

Section on Commercial Interests.

This section was called to order at 4 P.M. Wiley Rogers, the chairman of the section, being absent, Geo. J. Seabury was elected temporary chairman, and on taking the chair said: "Gentlemen, it seems to me that in the absence of the president, and the scarcity of members to

discuss a subject of extreme importance to every pharmacist in the United States, that, in my opinion, this meeting should be adjourned to the time of the second session that has been allotted to us, which I think is to-morrow night. I would regard it as a farce to go on with so few members, or we could adjourn until to-morrow morning at 10 o'clock, and make the question before us the first order of business, as this is a question, in my judgment, of more importance to the members of the Association than any scientific paper they could discuss. It is also a question requiring most careful attention, not alone by those who merely look at the commercial aspects of modern pharmacy. We are undergoing a revolution at the present time, and it is well for us to have a very large audience when this question is taken up. This commercial section was formed at first for one purpose, but by the process of evolution it has developed the discussion of various serious questions, which should not be discussed by a handful of members of the Association, but by as many men as it is possible to cram into this room, and it will be most interesting—the most interesting meeting of all the meetings of the Association, as we shall discuss, perhaps for the last time, a question of clear commercial ethics. As I said before, there is something away beyond that which we must consider, and for that reason I think that we all should regard this question as one of sufficient importance to postpone its discussion until to-morrow morning."

Mr. Sheppard—Since coming to this meeting I have received a telegram from the chairman of this section of last year, Mr. Willard Torbert, of Dubuque, which reads as follows: "Ask the section to pass a resolution commending the passing of the free alcohol bill. Kind regards to all members."

WILLARD H. TORBERT."

After some discussion Mr. Sheppard offered the following resolution:

Resolved, That it is the sense of the American Pharmaceutical Association that the action of the Congress of the United States in legislating for free alcohol for use in the arts is to be commended.

Frank G. Ryan said that before the question could be intelligently voted upon it would be necessary to hear from the Department at Washington, and to know the regulations they are going to impose, and that it may be already the intention of the Secretary to impose such regulations as will cause a good deal more trouble than the privilege is worth.

Chas. R. L. Dohme, of Baltimore, said: I had occasion together with my brother to visit Washington in relation to this alcohol question a few days before leaving for Asheville, and we were received by the Commissioner, who was very anxious to get some information as to how to construe the law, as he had no idea how to arrange it, and no one else knows at the Department, nor have they any idea how they will be able to arrange any remission of the tax. He wanted to know (because we are using alcohol in quite a quantity) what regulations could be adopted. But he could not get any information, nor could anyone in the Department tell how it would be possible. This provision of the act was passed at the ninth hour, and the Department is left utterly in the dark, and would like some information. It is one of those questions that will never amount to anything. I don't think the tax will be remitted, but it would do no harm to reserve the stamps off the alcohol barrels and finally make a claim for a rebate, but it is doubtful if you ever could get anything.

Albert E. Ebert, of Chicago, said: I do

hope that the retail druggists of this country, through the American Pharmaceutical Association, will not mix up in this matter. Now, do not do it—don't ask Congress to remit any tax or do anything about it—don't put your hand on it—don't ask for any favor of that kind. You don't know what the outcome is going to be. Where are we going to be placed? The restrictions may be of a character that we, as retail druggists, may never be able to take out a single gallon of spirits, while the manufacturers can take out all they want, and it is the death knell of pharmacy in this country. How are you going to make your tinctures? How are you going to compete? You will have to buy everything you want from the wholesale druggists. Don't ask for free alcohol—don't let us have any resolution in regard to it—don't ask for it—don't make any more whiskey and rum-sellers of the druggists than you can help. We asked for the tax to be taken off the proprietary goods—look at the records—at the time when I protested against that stamp tax being taken off, at that time what did the managers say—the prices will be reduced to you gentlemen—were the prices reduced? No! No! The moment the stamp tax was taken off and we asked for a reduced price, they replied that they were going to use the money for purposes of advertising, and you will sell more goods for it. We are to-day in the hands of the manufacturers as to this question. As a retail druggist I beg of you to think what you are doing. It is not necessary for you to do anything of this kind. Don't do it—I know what I am talking about.

Mr. Crisswell suggested that the Commissioner of Internal Revenue would probably construe the bill in such a manner that the department will require a retail druggist to manufacture his preparations in a bonded warehouse, and if that is done, the retail druggist will be in a pretty bad fix, because the government will not be at the expense of putting up that bonded warehouse, and there are a great many places where they do not have bonded warehouses at the present time. Of course the wholesalers and the manufacturers will have an advantage over the retail druggist, who will suffer.

The chairman, Mr. Seabury, said that if we can have free alcohol in the arts where it will be beneficial to the drug trade, and it can be so handled by the government, by prosecution or by fines, or by imprisonment, or by a dozen different ways, to compel men to be honest in the interpretation of the alcohol question, then it would in his opinion, be well. Under the circumstances, if two or three of us, representing the three branches, manufacturing pharmacists, retail pharmacists, and perhaps manufacturing druggists, if they could form themselves into a committee of three and talk this matter over, and offer the resolutions at the meeting to-morrow, we might get something in the way of help on this alcohol question. I myself believe that there is very little for us to do until the government itself takes a stand in the matter."

Mr. Good, of Missouri, said that: a well-meaning man introduced this amendment and he made it too far-reaching. All that was asked for was free alcohol in the arts, and that is all that was covered by Mr. Sheppard's resolution; but it is not the amendment offered by Mr. Hoar. It calls for free alcohol in the arts and in medicinal preparations, and it calls for so much that we can do nothing with it, and it is a misfortune, he thought, of Mr. Shep-

pard's resolution that it does not apply to what we would propose to give thanks for. We cannot give thanks to a thing so tantalizing that we would like to take the benefit of and be afraid to say so.

Mr. Sheppard stated that the resolution referred to read as follows: *Resolved*, That the action of the Congress of the United States in legislating for free alcohol in the arts should be commended, and a committee of three, of which E. R. Squibb shall be one, shall be appointed by the chair to secure such regulations for us for free alcohol in medicine as shall be of benefit to the drug trade.

MR. MAIN ON FREE ALCOHOL.

Mr. Main, of New York: In reply to what Mr. Whitney has said, I would say that the manufacturers could be trusted to look after themselves, and it was for that reason I moved that a committee be appointed to look after the interests of the drug trade. I am informed—I don't know this personally—that there are some new regulations in Germany in regard to the use of alcohol in preparing medicines, which extends to the retail drug trade. A gentleman in New York informed me of that fact and I asked him for the details and he has sent for those regulations. Now it seems to me at various times we have talked about free alcohol, and through a mistake we have got free alcohol for use in the arts—and medicine has crept into the new Tariff Bill as stated by Mr. Dohme, and the Secretary of the Treasury does not know what to do with it. I am advised he does not propose to adopt any rules or regulations, but proposes, as I am informed, to let the matter lay over until the next Congress has assembled, with the idea that the provision for free alcohol will be repealed, throwing the burden of the formation of the rules and regulations upon the trades interested—that is—relying upon those trades for suggestions, with an idea, of course, that the government's interests shall be fully protected, and to allow us free alcohol for use in the arts and in medicine exactly so far as can be done with safety to the government. It seems to me that it would be perfectly proper and in line with the objects of this commercial section for us to appoint a strong committee. The suggestion has been made that Dr. Squibb should be one—Dr. Squibb has made a study of this subject of alcohol for use in the arts and manufactures, and a few years ago appeared before the Ways and Means Committee at the time of the Mills Tariff Bill—when that Bill was talked about—and presented some very valuable statistics, * * * but it does seem to me, if it is a possible thing, that we should secure free alcohol for use in medicine, and legitimately we ought to try to do it—we ought, in other words, to look into this matter and to see what there is in it for the druggists, and if there is nothing in it let it alone. It seems to me a committee should be appointed to look into this matter.

Mr. Hallberg called attention to the fact that in Great Britain and in Canada they use methylated spirits and have done so for many years. He also stated that it seems such methylated spirits has been used for internal purposes, and that in the highlands of Scotland they use methylated spirits for a beverage. The Germans, he said, have discovered a sulphur compound, which, when added to alcohol, gives it a most offensive disagreeable odor, which makes it entirely unfit for internal use, but does not impair it in any manner for solvent purposes. It seems, therefore, that free alcohol should be confined solely to the purposes of a solvent,

and not to the purposes of internal medicinal administration.

Mr. Sheppard: I want to call attention to the fact that this was Mr. Torbett's idea. He was the chairman of this section for two years, and what he asks us to do can, in my judgment, be done in a different way. I confess to not being very sanguine in regard to it. I think in justice to the man sending the telegram and in view of the work he has done for this section, and the absolute certainty that it can do no harm for us to take action in the line of his suggestion and to appoint this committee, I certainly hope you will appoint it.

WORK IN THE LOBBY.

The chairman (Mr. Seabury) said: The chairman would inform the members that not more than a week ago an article appeared in one of our journals which gave the result of an interview between a lawyer and one of our most eminent pharmacists where a very different ground was taken. They went to Washington for the purpose of seeing the Secretary of the Treasury—not to secure the remission of the tax—they did not want the tax on it renewed. Now, that's the other side of the case. That's the only reason why it would be a good thing for this section even at this time. A committee of three would be sufficient to represent, you may say, the fraternal branches, although apparently somewhat antagonistic. On general principles the chair would rule that the resolutions would be laid on the table for the simple reason that we have no data from Washington to predicate any action upon.

A general discussion ensued, which was participated in by Messrs. Good, Hallberg, Whitney, Ryan, Dadd, Seabury, Main, Ebert, Nattaas and Remington. Mr. Morrison, of Montreal, was called upon to give his views as one familiar with the practical use of free alcohol in arts under the laws of Canada.

THE ENGLISH WAY.

Mr. Morrison said: It seems to me the members who have spoken so far have failed to grasp the point Professor Hallberg pointed out. As I read the sections of the act I do not see that the law provides for free alcohol as we use alcohol now. It says alcohol for use for manufacture, or in the arts. To my mind there can be no question about it that if the government were to take off the excise duty on alcohol as it is to-day, and allow pure alcohol to be sent out without any excise duty, it would practically mean the ruin of the retail druggist because it is an utter impossibility for the government to keep track of the alcohol sent out and used by every retail druggist in the country. Consequently the manufacture of articles containing alcohol would immediately fall into the hands of manufacturers there can be no question about that whatever. I think as the act reads there is, at present, nothing to prevent the Government from adopting a plan in use in Canada and Great Britain, that is the using of methylated spirit. We have had methylated spirit for quite a number of years. That is alcohol containing 10 per cent of methyl alcohol. Now this methyl alcohol was added for the purpose of preventing its use as a beverage, or in any mixture intended for internal use. It could be used for such purpose as for instance making spirits of camphor or for certain liniments or for making varnish.

Another thing in connection with that was, that the alcohol distillers used to

prepare this article—by using the methyl alcohol obtained from the government, and adding it to the ethyl alcohol, and sending it out in that shape. The government found even with this 10 per cent. added, it was being used as a beverage, and in order to stop, that they withdrew the right to manufacture it from the distillers, and all the methylated spirit used in Canada is manufactured in Canada under the immediate supervision of the government. They now add 25 per cent. of methyl alcohol. That can be used for burning, for making varnish and for certain liniments. One druggist I know uses it in tinctures and a liniment with iodine. The result is, in some counties, he has the reputation of making the strongest tincture of iodine in the world. As you are well aware iodine forms with methyl alcohol a volatile compound which acts upon the eyes something like the oil of mustard, and the people have the idea that the man sells awfully strong tincture of iodine. I know of only one who does that. I see nothing to prevent the government adopting that plan. How do we know but what the government is elaborating such a plan as that. If that was adopted, I do not think it would injure the retail druggist, but a free wine spirit would be the ruin of the retail drug trade.

THE MOTION TABLED.

Further discussion was had on this question, the original motion was laid on the table and an amendment providing for the appointment of a committee to act or co-operate with the National Wholesale Druggists' Association at the proper time when this question regulating the admission of free alcohol comes up for discussion in Washington. The motion to appoint a committee of three to formulate a resolution bearing on this subject to be presented to the committee on commercial interests at the next session was adopted, and Mr. Dohme, Mr. Whitney and Mr. Hallberg were appointed a committee, Mr. Hallberg being made chairman of the committee.

The section then adjourned.

Third Day's Proceedings.

The convention was called to order by the president, Mr. Patch, at 10:20 A. M. on Wednesday. Mr. Kennedy read the minutes of the council, presenting 46 names, and on motion they were invited to become members of the association; 17 names for membership were presented, and according to the by-laws they were posted. There being no further business to come before the association at this time, the association was adjourned.

Section on Commercial Interests.

The section on commercial interest was then opened, George J. Seabury being in the chair. The secretary read the minutes of the last meeting, which were adopted.

The chairman, after a few introductory remarks, said: The object of this section is, as we all know, the discussion of commercial problems, for airing our grievances, and also to have some record for our trade interests, and for that reason, being the foundation stone for our bread and butter, it is a valuable section when properly conducted.

BENEFITS OF ASSOCIATION.

The great protection which pharmacists have is by association, and where they have the fraternal regard for each other they are always successful, where they have not, failure is the result. You know that very well, and for that reason in the

cutting committees they turn to their own interest at the cost of their neighbors. This practice, in my judgment, has come to stay. By acts of indifference, if for no other reason, and it does seem to me that when our own brethren will not stand together they must suffer the consequences, and while the protective plans have not in a measure been as valuable as some would have wished them to be, the fact remains that 80 per cent. of the druggists in the United States are not cutters.

From a commercial standpoint the interests of the drug trade are undergoing a revolution and I don't think that any man can bear up against it. It is here. The question in my mind is, has it come to stay? That all depends upon organized pharmacy in this country.

Another question which confronts us is the relation of the physician to the pharmacist at the present time, one upon which pharmacy will either stand or fall, and it is in your hands. * * *

THE INTERSTATE LEAGUE.

Mr. Ebert said, that as far as the West was concerned they had had a good deal to do with it, having contributed a great deal of money in Chicago, and not having seen any benefit from it.

Mr. Alexander stated that one of the prime movers in the Interstate League had joined the cutters and was forced into it, not being able to stand alone.

Mr. Butler stated that the movement in regard to the Interstate League had started in the West and had been transferred to the East.

He regretted that Mr. Canning was not present to speak of the Interstate League, as he is the president, and with Mr. Cobb, and several others from Boston had done a good work in his section, by the organization of small associations or small leagues in the separate towns, thus doing a great deal of good.

Mr. Hallberg said that a statement had been made to him that a certain merchant in Chicago had paid \$700 to the Interstate League without deriving any benefit, and hoped that Mr. Ebert would explain that statement.

Mr. Ebert: In what way?

Mr. Hallberg: By reducing the amount to \$150 [laughter.]

Mr. Ebert: I beg your pardon, I want to say right here that it is not so, and at the present time, after paying all expenses we are still out of pocket, and the matter is in court. The gentleman is not a member of the organization and knows nothing about it.

THE HAYES FIASCO IN CHICAGO.

Mr. Hallberg: I think Mr. Ebert will agree to this qualification that while the druggists at Chicago may have expended \$700 a great portion of that was for the Hayes Plant, and not the Interstate League.

This question was discussed at length.

Mr. Dadd stated that he was interested in this matter in relation to the patent medicines, and had come to the conclusion that it amounted to nil, and that the true source of verging this question properly would be the pharmacist himself.

Mr. Sawyer endorsed the remarks of Mr. Butler in regard to the Interstate League and believed it could be made a success.

Mr. Alexander was of the opinion that it never would succeed in the large cities.

Mr. Eliel thought they had swept around the circle and that they had made very little progress since the enthusiastic meeting in Washington.

Mr. Mason thought it would be a matter

of interest if Mr. Eliel would state where he obtained his supplies. This question was ruled out of order.

Mr. Hallberg: On this question I have a point of information. I would suggest that the names of manufacturers and wholesalers selling to cutters not be named, but the names of those that will refuse to sell to cutters be named.

A Member: There are not any. [Laughter].

Mr. Whitney: I think it is pretty good ethics and pretty good common sense to get something better than what you are using before you discard what you are trying.

If there is no better plan to present than the Interstate League, keep to that plan. The sun rises in the east, and as the Interstate League has risen in the east give it a chance to settle in the west.

Mr. Good moved the following resolution:—Resolved, That it is the sense of the commercial section that the plan, that is, the platform of the Interstate Retail Druggist League—is the proper one upon which druggists should operate.

This motion was seconded by Mr. Ebert.

INTERSTATE LEAGUE ENDORSED.

Mr. Alexander offered an amendment to the resolution. Resolved, That the commercial section of the A. P. A. endorses the plan of the Interstate League.

This amendment was accepted by Mr. Good and seconded by Mr. Ebert. A declaration of the principle of the League was called for and read to the section and debated, Mr. Watson stating that if 80 per cent. agreed to the plan the other 20 per cent. would take away all their business.

Mr. Hallberg, in explanation, stated that the declaration of principles of the Interstate League did not bind any member of the A. P. A. He called upon Mr. Robinson for a statement of his position in the matter.

THE CUTTER'S POINT OF VIEW.

Mr. Robinson: Mr. President, I have not a word to say, but I am a cutter and I propose to conduct my business in my own way. I pay a hundred cents on the dollar for my goods and sell them just as I please.

Mr. Jacobs inquired what constituted a cutter. Is a man who gets 67 cents for a dollar article or the man who gets 75 cents or a man who gets 80 cents—are we all to be classed as cutters—where do you get a dollar for a dollar preparation? I don't know of any place in this country where we get it. I want to know what constitutes cutting—that is, where cutting begins and where pharmacy stops.

CUTTING IN NEW ORLEANS.

Mr. Sherman, of New Orleans: Three years ago at the White Mountains our friend Mr. Finlay boasted of New Orleans being free from cutters. To-day I am here regretting exceedingly that it is not so; we have to-day cutters of the very worst type, and I came up here to-day to make a suggestion. I don't think we can eradicate the cutter as easily as we talk and would suggest that the prices of patent medicine be raised to such a figure that the cutter cannot cut.

The resolution was then adopted.

REPORT OF THE COMMITTEE ON ALCOHOL.

The report on the committee on free alcohol was then read by the chairman Mr. Hallberg, as follows: "The American Pharmaceutical Association at its forty-second annual meeting now being

held in Asheville, N. C., having considered the recent action of Congress in legislation exempting alcohol used in the arts or in medicinal or like compounds from internal revenue tax as prescribed by section 61, of the act to revise taxation, etc., known as the tariff bill of the last Congress.

"Being convinced of the impossibility of regulating or controlling the use of alcohol in a broad sense as such exemption might be construed, therefore earnestly and unitedly protests against any interpretation of such action except as follows, to wit:

"That the payment of rebate on internal tariff on alcohol under section 61 of said act be confined to alcohol used in the manufacture of those products in which alcohol used is so changed as to lose absolutely its chemical and physical properties, including the class of chemical compounds known as the ethers, chloral and chloroform."

Mr. Hallberg then made an explanation of what led the committee to formulate the resolution in such a way that it might expedite matters.

The committee was entirely unanimous and went over the ground carefully and believed it to be to the best interests of the Association to take no stand further than what is known to be absolutely safe.

Mr. Sheppard did not claim to have knowledge enough of this general subject to be able to answer the question as to whether the secretary of the treasury can make rules which are strict and binding and questioned very much the desirability of an association of retailers sending in a request to the secretary of the treasury—"please do not give us free alcohol."

Mr. Good: We came to the conclusion to our own satisfaction that while we have been asking for free alcohol so long we got an answer which gave us more than we could manage; in other words to carry out this provision of the tariff act would be putting everything into the hands of large manufacturers who could put up bonded warehouses. It is because of the difficulty of carrying out the provisions of this act that we had this committee appointed to draft resolutions, which we thought might meet the case. In my opinion the committee don't ask quite enough; they enumerate three articles and make a general request as to other articles for the manufacture of which they want free alcohol, in one of which alcohol does not enter into the manufacture at all and that is chloroform. It may enter into its manufacture, but as a matter of fact it does not, but it will do no harm to leave it there—that is all right. There are other products in which we are vitally interested and in which the retail druggist does not make and cannot afford to pay for his alcohol for mere experimentation. I think we might as well enumerate those and more experimentation. I think we might as well enumerate those and put in a provision for manufacturers who make chemicals and alkaloids, inasmuch as we enumerate a few articles.

Mr. Hallberg said: With alcohol at 20 to 40 cents a gallon there would be no possible excuse for making chloroform from acetone and chloroform would be made again from alcohol. Now I would like to call upon any professor of chemistry or any manufacturing chemist, or upon Mr. Thompson, of Washington, to name a single preparation or a single compound that is made from alcohol not embraced in those three terms, that is used in pharmacy, with a possible exception of aldehyde. Now I will ask if he can name a single one made from alcohol

with the chemical constitution of alcohol changed that is not included in those two terms.

Messrs. Heckler, Wills and Graves stated that they regretted that after striving so long to obtain free alcohol the Association should find it desirable to oppose free alcohol.

Mr. Butler thought that if this act should really go into effect all retail druggists would have to sell out their stores.

Mr. Mason: Several observations have been made on free alcohol and I should like to state as authority that acetone chloroform is preferred in countries where practically free alcohol is used.

TO APPEAL TO WASHINGTON.

Mr. Slack thought that the point made by Mr. Dohme, that it is probable that the law may be changed as soon as Congress meets, was very important, because, although we might get free alcohol from now until some time in December, or possibly the first of January, the price must certainly decline. It is very much easier to lower prices than to restore them, and if we succeed in getting free alcohol and in making our spirits of camphor and other preparations, necessarily as soon as the tax is placed upon them we must try to restore them to their former prices and in doing that you will encounter great resistance. There is another point I would like to mention in connection with the report of the committee. If I understand the facts, the internal revenue of France and Germany require that a certain per cent. of methyl alcohol be mixed with the ethyl alcohol so as to render it unfit for drinking purposes. This was attempted, or something similar, when the Morrill Tariff Bill was before Congress, and Professor Remington mixed a ten per cent. methyl alcohol with ordinary methyl alcohol and presented it to the rum-seller in Baltimore, and asked him, "Can you do any anything with it?" He said at once, "It is bad alcohol, but I can make a pretty good gin out of it."

The subject was further discussed by Messrs. Good, Watson, and Ebert.

Mr. Watson moved that a committee of three be appointed, including E. R. Squibb, to visit Washington and to represent the drug trade in this matter. The motion was tabled.

The question being on the original motion to adopt the report of the committee, it was adopted.

Mr. Whitney offered the following:

Whereas, The A. P. A., after careful consideration and exhaustive discussion of the recent action of Congress upon the alcohol to be used in the arts or in medicinal or like compound, and after reference to a special committee, have clearly and decidedly formulated their opinion; therefore be it

Resolved, That Messrs. W. S. Thompson, of Washington, D. C., Charles E. Dohme, of Baltimore, and Charles Caspari, of Baltimore, be requested to take a certified copy of our action and a copy of our proceedings of 1892 and 1893 and call the attention of the Secretary of the Treasury to the list of the members and the work in which the Association is engaged.

Mr. Watson thought that our minutes of 1892 and 1893, when compared with our present action, would be simply stultifying, as I would suggest that a complete printed list of the membership—such lists have been made—be shown to the Secretary, of the Treasury, so that he can see what is represented by this association.

The Chairman: It seems to me that the secretary of the treasury and those who have the regulating of this question in their hands certainly will pay much attention to us. So far as our proceedings are concerned, they don't amount to anything and the work will have to be done by a committee.

The question being on the motion of Mr. Whitney, it was not agreed to.

Mr. Simpson then made an announcement in reference to the collection of indigenous drugs of North Carolina.

An election was then had for the chairman and secretary of the section. George Seabury of New York was elected chairman and Louis F. Challin of New Orleans secretary.

Scientific Section.

The section on scientific papers, L. E. Sayre chairman, was opened on Wednesday evening by the chairman reading his address as follows:

CHAIRMAN'S ADDRESS.

It is customary to allow a few minutes to the chairman of the section to make some remarks at the opening of the session, and I shall, with your consent, take the liberty of using the time allotted for this purpose to present somewhat of a semi-pharmaceutical subject, believing that this will be a pleasant and perhaps profitable diversion, and a change from the routine of the hour.

I wish to say, however, before proceeding to the subject in hand, that I have been very much gratified with the help and the cordial endorsement of the members in the work of the committee of this section.

Hearty responses have been received from very many members, and those who were not in a position to contribute personally expressed their hearty co-operation and interest in the work. I feel that the importance of the scientific department of the Association is felt on the part of every member, whether he be personally interested in the legislation, education, or business sides of the organization, and I have felt greatly honored in acting as the representative of this one special department.

I have with me some forty papers to be read at this session; many of these are of necessity lengthy, and according to the rules and the policy of the Association it is necessary, of course, that they be presented in the abstract.

AN ANALYTICAL COMPANION TO THE U. S. P.

It is my desire that at an early stage in the meeting a special committee be appointed to consider a contribution which I have here from J. B. Naglevoort, entitled "Advance Sheets of an Analytical Companion to the U. S. Pharmacopoeia, 7th Edition." This work is offered to the A. P. A. at this meeting by the author, who suggests that when the work is complete it be published in a form somewhat similar to the National Formulary, and be distributed to the members of the Association at actual cost. I have looked over the material and have consulted with the president of the Association, who, with me, has agreed that it would be best to have a few duplicate copies typewritten, and that these copies be distributed to the members of the committee who shall be appointed at this meeting to determine upon the proper disposition of the paper, or rather the work itself when completed, as to whether the Association shall accept it upon the terms of the author or not.

Certainly the thanks of the Association are due to the author for his good words, which have accompanied this offer, and for the effort that he seems to have put forth in an unselfish way, and

I would therefore suggest that, as I have stated, at an early time, the Association appoint a committee of five, or any other number, which shall go over the typewritten manuscript and make a report with recommendations upon it.

Now, as I have stated, I shall endeavor to entertain the friends gathered at this meeting in lieu of an address, with the brief treatment of a semi-pharmaceutical subject.

AMERICAN COLOCYNTH.

At the last meeting of the Kansas Pharmaceutical Association I was told by one of the visiting members that he had met in his travels a gentleman on the road, who had said that the Colocynth apple was a native of the Western part of the State. This interested the gentleman sufficiently to procure the so-called Colocynth, and with this plant he came to me for its identification. I present to you here the root of this plant for the purpose of showing its marvelous growth.

ODD SPECIES OF CUCURBITACEÆ.

We have in the open plains at an altitude of 2,000 feet above the sea up to the base of the Rocky Mountains these enormous roots, some presenting odd characteristics not observed in some found in the Eastern regions. One of these is the *Cucurbita Perryensis* (gray), now known as the *Cucurbita Foetidissima* (the common name of the plant is wild pumpkin); it has a trailing stem, varying triangular wooly, pubescent leaves, whose blades are six or eight inches in length, the fruit being about the size of an orange, perfectly spherical in shape, yellow when ripe, with greenish longitudinal markings, fibrous internally, as can be seen by inspection. The seeds are generally about 200 to the apple. About one-third of an inch in length. The root, however, is the remarkable part of the plant, which I herewith present you. It is hollow. The inside of the cavity being covered with a healthy cortex, there being no signs of decay present; around the margin of the cavity are the remains of several stems, showing that in this portion the buds of the annual stem appear. At about two feet from the ground the root bends abruptly and sends out a couple of branches. The root is fibrous internally, almost woody, containing an enormous amount of stored-up nourishment for the rapid development of annual stems, but this store of nourishment is amply protected against the hungry gophers, moles and mice and other animals on account of its intense bitterness.

NATURAL SELECTION.

Prof. Bessy, writing upon this subject, says, that in the struggle for existence those roots only have remained whose bitterness was sufficient to overcome the hunger and thirst of the animals of the plains.

ANOTHER VARIETY.

Prof. Bessy speaks in an article on this subject of another one which resembles this very much, known as the wild morning glory—the *Ipomoea Leppafolia* Torr. A beautiful plant with a bushy head bearing numerous large purple flowers, closely resembling those of the common cultivated morning glory of the gardens. The stems being numerous, branching, rarely attaining the height of a couple of feet, but the root

is also enormous, often approaching the size of the wild pumpkin.

I may state in closing that the roots of the wild pumpkin have been found of about seven feet in length and of proportionate diameter.

The papers were presented to the meeting in the following order: 4, 10, 15, 25, 12, 23, 30, 11, 16, 6, 17, 1, 35, 34.

There being no report to be received, nominations for chairman for this section for the ensuing year were taken up.

On motion of Mr. Good a committee of three was appointed to report upon the chairman's address.

The following nominations were then made for officers of the section:

For president: Mr. Schlotterbeck, of Michigan; Mr. Hallberg, of Illinois; Mr. Hurty, of Ohio; Mr. Holtzhaver, of New Jersey; Mr. Whelpley, of Missouri, and Mr. Kremers, of Wisconsin.

Messrs. Hallberg, Hurty and Whelpley declined the nomination.

Nominations for secretary were then taken up, and the following names were presented:

J. H. Beal, of Ohio, and Alfred R. L. Dohme, of Maryland.

The Chairman then presented paper No. 4, and on motion the paper was referred to a committee composed of Messrs. Hurty and Patch.

RHUS TOXICODENDRON.

The Chairman then took up paper No. 10, on *Rhus Toxicodendron*.

Prof. Whelpley then read his paper and said: I do not wish to prolong the discussion on this subject, and will leave the paper in your hands.

Mr. Bartley: It may be a matter of some interest for me to state that I myself was poisoned, and the first time I was ever affected was by the dried drug in the winter. Prior to that time I had handled it with impunity, but in working in the brush in the winter time when it was thoroughly frozen I became poisoned, and I was afterward poisoned by the leaves.

POISONING FROM DRIED RHUS.

After some general discussion participated in by Mr. Hallberg and others, Mr. Lloyd said: For many years I have worked considerable quantities of rhus in the dry state. I have never found anyone subject, although working it in some quantity in making the fluid extract, and Eclectic told me to use the fresh rhus, and some persons actually have gone and have handled any quantity without being affected by it, while others cannot stay in the room while it is being put in the bottles without being affected. Some people are so sensitive to fresh rhus, that I have known one young lady from simply being in the room in which the rhus was being taken from the fresh drug, so affected by it that she was confined to the house for two weeks. I could hardly believe this to be true, but it was demonstrated more than once, until finally whenever rhus was opened she was permitted to remain at home, and we did not allow her to come into the establishment. Others would go into the country and take the leaves fresh from the vines, put them into sacks, take them back again and put them into the percolator and put alcohol over them and not be affected in the least. I will add that this young lady was sensitive to the fresh, but has never been poisoned by the dry preparation, although she has handled it. Idiosyncrasies of this kind are often met with in those who handle this substance, so much so as to make one believe in the delusion of the

Homeopath, and more than one Eclectic physician has told us that they will not use any preparation made from the dry rhus, and insist on using the green leaves gathered in the fall just before they begin to change their color.

Mr. Payne: I would like to say that I have been poisoned four different times with rhus. In my native State there are enormous quantities of rhus. *Rhus Toxicodendron* is not so poisonous as some other varieties. I know of one case where a gentleman slept in the woods where there was a quantity of rhus, and he died from the effects of it.

Mr. Lloyd: I would like to make a correction. Mr. Main informed me that I said inadvertently that it was the root of the rhus—it is the green leaves—matured leaves.

The Chairman: That makes the contribution of the evening very valuable because we have a case where the dried leaf has actually produced the effect. Now how can we possibly reconcile the two. I think that it might be suggested that in the dry condition it is more dormant perhaps, you may theorize in that way—certainly we have here a subject worthy of investigation, and I hope some one will take it up and present a paper upon it another year.

Mr. Eliel: This is a very interesting paper, and it might be interesting to know of a very simple remedy for rhus poisoning.

Mr. Whelpley: I have named 34.

Mr. Eliel: Did you name the sulphite of potash? That is the quickest and most effective remedy, applied externally in a hot, strong solution, removing the effects of rhus poisoning in from 20 to 48 hours.

Mr. Koebler: At one time a doctor had occasion to make a lot of tablets; not being susceptible to the herb, he would go right along and put his hand in, and he mixed it with his hand, the result being that he was terribly affected by the dry powder.

Mr. Simpson, speaking from personal observation, said that he had found salicylic acid a specific, he had also seen excellent results sometimes follow a local application of fluid extract of serpentaria. Among other remedies mentioned in the discussion were calcium sulphite, iodine, Goulard's extract, aqua ammonia, tincture of lobelia.

J. U. Lloyd then presented an abstract of a paper on "The Grain Weight," which was discussed by Messrs. Oldberg, Ebert, Sayre and Connors.

Charles T. P. Fennell read an abstract of an exhaustive paper on "Oil of Cloves," which was discussed by Mr. Remington. The further discussion was postponed, and the section adjourned.

Fourth Day's Session.

On Thursday morning the general session was called to order by President Patch. The report of the Secretary of Council was read and agreed to, when the session adjourned.

Scientific Section.

The second session was opened by the chairman, L. E. Sayre, immediately after the adjournment of the general session, he stating that the papers would be taken up in the following order: 34, 31, 32, 8, 9, 13.

The secretary then read the following names for chairman: Messrs. Schlotterbeck, Holtzhauer and Kremers.

Messrs. Kaufmann, Beale and A. L. Dohme were announced as the nominees for secretary.

ELECTION OF OFFICERS.

After some discussion as to whether or not the nominees would be present at Denver next year, Mr. Kremers' name was withdrawn, as no one could state whether or not he would be present at the Denver meeting.

The balloting being proceeded with, Alfred R. L. Dohme of Baltimore, for chairman of the section, and George B. Kaufmann of Columbus, Ohio, as secretary, were elected.

Prof. Fennell then continued the discussion of his paper on "Oil of Cloves," which was participated in by Mr. Hallberg and others.

HENRY KRAEMER ON EXAMINATION OF CLOVES.

Henry Kraemer then presented a paper on the "Microscopical and Chemical Examination of Cloves." In the discussion of this paper, Mr. Simon said: "This paper seems to me to be one of more than usual interest, not so much on account of the work done, but on account of the fact that we have here introduced for the first time a method that has not been applied to any extent in the field of quantitative analysis or estimation. In making this statement I desire not to be misunderstood, knowing well that we have used the microscope in the determination, say of the diatoms in infusorial earth, and other matter, and we have used the microscope to determine the weight of the blood corpuscle, but as far as my knowledge goes, no attempts have been made heretofore to use the microscope actually, in what we might call a micro-balance in the field of analytical work, and the merit of this paper, I repeat, is the opening of this new field to the investigator. I do confess that the results so far are far from absolute exactness, but we should remember that every new method requires the working out, not by an individual, but by a number of men and by such hearty co-operation on the part of many. * * *

A discussion followed which was participated in by Messrs. Hallberg, Eccles, Whelpley, Remington and Bartley. Mr. Kraemer stated that he would be pleased to furnish the necessary micrometers to anyone who wished to pursue the subject.

J. O. Schlotterbeck presented in abstract six papers from the University of Michigan.

The report of the committee on the "Analytical Companion to the United States Pharmacopoeia," contributed by J. B. Nagelvoort, was as follows:

We find the paper contains many very valuable suggestions that are of great service, but inasmuch as the paper is presented accompanied by a proposition that it shall be published in the style of the national formulary and issued at cost to our membership, involving expense, and also from other considerations outside of the province of the section on scientific papers, we recommend that the paper be referred to council with the suggestion that the information contained in it be placed by the author at the disposal of the committee on revision of the U. S. Pharmacopoeia at a early date. Signed, C. S. N. Hallberg, J. N. Hurty and Edgar S. Patch.

Alfred R. L. Dohme then read a paper on the relations of hydrastine and berberine. In the discussion that followed T. L. A. Greve said: I see that this paper begins with a statement that these two alkaloids were for many years regarded as identical. Now I myself have abstracted two, as early as 1854 berberine in the form of muriate, and in 1862 hydrastine was obtained in very fine crystals in the laboratory of the William S. Merrill Chemical Company. In this connection it would be,

perhaps, proper to raise the question whether berberine of hydrastis is identical with the berberine obtained from the viburnum vulgaris, which, to me, is doubtful. At the Chicago Fair I went to see the Merck exhibit, and I wished to see the berberine salts. I was shown what was said to be berberine salts, and they appeared to me to be from the viburnum vulgaris. I was shown others, but there was not the appearance of the sulphate. * * *

A discussion followed, which was participated in by Messrs. Lloyd, Ebert, Kebler, Hallberg and Alpers.

Lyman F. Kebler then presented a paper on "Analytical Alkaloidal Chemistry" (see page 278). Concluding his paper, Mr. Kebler said: "Just before I left home I saw in the American Druggist and Pharmaceutical Record an article by Messrs. Farr and Wright. We are all acquainted with the type of men of Mr. Farr and Mr. Wright, although the first impression I got from the article was that they were not favorably disposed toward the process. They give notes of the results, but conclude that 'volumetric methods are useless.'"

Messrs. Dohme, Bartley and Hallberg took part in the discussion which followed, the general conclusion being that results obtained from the use of Mayer's reagent were faulty, in that they varied so widely in the hands of different people. Mr. Hallberg asked whether Keller's method was not that of Beckurt's.

Mr. Caspari: I do not think Keller's method is Beckurt's method. Keller has recently began an investigation in this matter, and if I remember, has written largely on the subject, and has given an analysis and an opinion that the volumetric method is the only safe method in comparison with gravimetric results. The subject was started two years ago at the meeting at the White Mountains, and I had the pleasure of making a few remarks upon it. Since then manufacturing houses have taken it up all over the country and Europe likewise. I think Mr. Hallberg is a little in error in saying that the volumetric methods will be considered inferior to gravimetric—just as much as the volumetric titration of inorganic substances is a fixed fact and recognized by scientists. All agreed that we can purify alkaloids more acceptably by a titration with volumetric acid solutions in assaying alkaloidal drugs and galenical preparations. And I have no doubt that instead of being pushed into the background, it will be brought into the foreground.

Mr. Eccles said that he did not think Mayer's reagent such a bad thing as Mr. Hallberg had thought it was. He said: I think if a man works with that, works carefully, and keeps to the condition in that work, his results will always be the same as with any other solution of known strength, and by comparison he will do fairly good work. As far as the volumetric method is concerned he will come to a certain conclusion, and that will be what Mr. Hallberg has been looking forward to.

Further remarks were made on the same subject by Messrs. Sheppard, Eliel, Caspari, Lloyd and Dohme.

The Chairman: I will appoint on that committee, to consider this question of alkaloids, Charles Caspari, Jr., A. L. Dohme and Lyman F. Koebler.

The next paper presented was a paper on "Laboratory Notes," by Edgar L.

Patch, which was discussed by Messrs. Thompson and Hallberg.

A paper on "The Behavior of Ferratin and Iron Albuminate," by J. O. Schlotterbeck and S. R. Boyce was presented, and this was followed by a paper from William Simpson, on the "Indigenous Drugs of North Carolina." In the discussion that followed it was suggested that a committee be appointed to act on Mr. Simpson's offer to experiment with the cultivation of any medicinal drug that the Association might name.

After distributing a paper on "Dionae Muscipula Ell (Venus Fly Trap), the section adjourned.

Scientific Section.

AFTERNOON SESSION.

The Section on Scientific Papers was opened with Dr. H. M. Whelpley in the chair, the chairman, Dr. L. E. Sayre, being unable to be present.

The minutes of the last session were read and approved. J. N. Hurty offered the following resolution, which was adopted, viz:

Resolved, That the officers of the scientific section be instructed hereafter in all printed papers to have signed thereto simply the name of the contributor.

REPORT ON CHAIRMAN'S ADDRESS.

The report on the chairman's address was then read, as follows:

Your committee has read the address of the chairman with care, and find but one recommendation made, namely that regarding the disposal of J. B. Nagelvoort's paper. Since that has already been disposed of by our chairman, nothing more can be done in that direction.

We note with great satisfaction the large number of valuable and interesting papers that Prof. Sayre has succeeded in securing for his section. He has been earnest and active in our behalf. His success is exceedingly gratifying to us, as no doubt it is to all the members of the Association, we therefore tender him, in behalf of the section, our sincere thanks. Signed by the committee.

On motion the report of the committee was adopted.

Following the reading of papers came the installation of officers. The minutes of the meeting were read and approved, and on motion, the section adjourned.

Fifth Day's Session.

The Convention was called to order by President Patch.

The Secretary of Council read the records of Council partly, and Mr. Sheppard rose to a point of order, that only the propositions for membership should be read at this time. This point of order was sustained by the president, and the nine gentlemen recommended the day before were, on motion, invited to become members of the Association.

The Secretary of Council then presented the names of nine applicants for membership, and these names were posted in the room. The Convention then adjourned.

Section on Legislation and Education.

The Section on Legislation and Education was then called to order by the chairman, Dr. Eccles, who then read his address.

On motion of Mr. Sheppard the recommendations contained in the address were referred to a committee.

Before the reading of papers by Professors Rusby and Oldberg, Prof. Beale of Scio College, made a statement with reference to the inclusion in last

year's report of a paragraph placing that institution, with some other Western schools, among "business ventures."

Professor Remington moved that the statement of Prof. Beale be placed upon the records of the Association.

Mr. Hallberg attributed the objectionable paragraph to a printer's error, and expressed regret that Scio College should have been misrepresented.

Officers were then nominated to serve during the ensuing year, and the section adjourned until next day.

Evening Session.

Dr. Eccles opened the second session of the Section on Legislation and Education on Friday evening, and Mr. Hallberg was asked to assume the duties of secretary.

Mr. Simpson offered the following resolution, being similar to the resolution passed by the International Pharmaceutical Congress which met in Chicago last year.

Resolved, That it is the sense of the Association that no person should be admitted as an apprentice in pharmacy unless he shall have given evidence by satisfactorily passing a preliminary examination, or otherwise, that he possesses a general education sufficient for such apprenticeship, and has advanced as the conditions of the practice of pharmacy in the United States permit, and his term of apprenticeship in pharmacy should in no case be counted so far as it may antedate such evidence of sufficient preliminary education.

Resolved, That the period of apprenticeship in pharmacy ought not to be less than four years, including the time devoted by the apprentice to regular attendance upon the courses of instruction in pharmaceutical schools.

Resolved, That this Association approves of the establishment of a compulsory curriculum of pharmaceutical education and holds that no person should be regarded as a qualified pharmacist who has not pursued to completion a systematic course of instruction in chemistry, pharmacognosy and pharmacy, and that the Secretary send copies of this resolution to each Board of Pharmacy and to the Secretaries of Pharmaceutical organizations where they have any pharmaceutical law.

After some discussion this series of resolutions was adopted.

Papers were then presented by several members. The paper by Prof. Oldberg came in for an animated discussion by Profs. Hallberg, Remington, Schlotterbeck and others.

Mr. Sheppard offered a resolution requesting the Association to furnish the section with more time for the transaction of its business.

Mr. Hallberg moved that all the rest of the papers be read by abstract, which was agreed to.

Mr. Slack moved that a vote be taken on the question "Should graduates in pharmacy be compelled to pass an examination before the Board?"

The vote was in the affirmative.

Mr. Payne offered a resolution concerning pharmacists in the United States navy, which was referred to the general session.

OFFICERS ELECTED.

The section then proceeded to the election of officers, which resulted in the choice of Prof. J. M. Good of St. Louis, for chairman of the section, and Prof. C. S. N. Hallberg of Chicago, for secretary, and the newly elected officers were installed.

The committee on president's address presented their report, commending the address, which was accepted and adopted.

The officers were tendered a vote of thanks for the excellent work performed, after which the section adjourned.

Sixth Day's Proceedings.

The last general session was convened on Saturday morning, Sept. 8.

After the transaction of some routine business Mr. Ebert moved that the Council be allowed to empower publishers to use the National Formulary.

This motion created considerable discussion. Prof. Caspari spoke to the motion and said that it would popularize the formulary and be of great benefit to the profession at large.

Mr. Mayo stated that the view taken by Prof. Caspari carried with it the idea that we are a commercial body and wanted to do it to make money, when that was not the object, but that the object was to induce its general adoption, and that the Association could afford to do it even if there was a small loss.

Mr. Ebert said that the Council, if they deemed it wise, might ask some financial consideration, and made that as an amendment to his motion, which was passed as amended.

PROPRIETARY PREPARATIONS CONDEMNED.

Prof. Good offered the following resolution in response to a resolution sent by the American Medical Association:

Resolved, That the A. P. A. condemns prescribing and dispensing of proprietary medicine while the necessity of protecting capital invested in manufacturing galenic medicine is recognized.

Resolved, That the work of formulating our pharmaceutical preparations should be published, but that its technical and scientific character should be given it so that it may appear in professional literature and that the preparations and pharmacopoeia and National Formulary be free to pharmacists to manufacture and sell.

Resolved, That physicians be particularly requested to consult the U. S. P. and National Formulary in making preparations, and we request that they be made text books in the colleges.

On motion the report of the committee was accepted and adopted.

The report on the communication of the National Medical Association was then read and adopted.

ON THE PRESIDENT'S ADDRESS.

The report of the committee on the president's address was then received and acted upon.

The report commended the first recommendation, that this Association publish an observation sheet for the purpose of recording difficulties of practice, etc. (See president's address.) The same, when filled, to be forwarded to the chairman of the Scientific Section for comment and presentation at the next meeting of the Association.

The suggestion of the president in relation to taking steps toward securing a National Pharmacy Commission and a National Pharmacy Law, was not endorsed by the committee.

The committee did not concur in the recommendation to establish a scholarship, on the ground that the Association was not financially in a position to undertake the task. The report was adopted.

PHYSICIANS SUPPLY HOUSES CENSURED.

Mr. Whitney submitted the following resolution:

WHEREAS in the past few years several manufacturing pharmacists have volunteered and made it a specialty to supply physicians with ready made material.

WHEREAS such a practice is highly detrimental to the advancement of science of medicine as well as the commercial interests of dispensing pharmacists and druggists, therefore, be it

Resolved, That the A. P. A. condemns such practice and recommends and advocates the withdrawal of practice from all firms engaged in furnishing physicians direct with their manufactured products.

The resolution was seconded by T. G. Ryan, and was adopted.

A communication from the Society of

Belgian Chemists was read and reviewed.

The following resolution, introduced by George F. Payne, and referred from the Section on Legislation, was presented and passed:

WHEREAS the position of pharmacists as professional men is not properly recognized by the United States Government either in the navy or army, be it therefore

Resolved, That the President of our Association appoint a committee consisting of one from each State in the Union, the duty of which Committee shall be to procure in each State the support of their Senators and Congressmen, by sub-committee to the passage of an Act giving the pharmacists of the army and navy the same rank and pay as now enjoyed by assistant surgeons in these two branches of the service.

An adjournment of one minute was had, after which the by-laws were so amended as to give additional sessions for the transaction of the business of the Scientific and Educational sections.

A vote of thanks was passed by the Association, expressing its thanks to the chairman of the citizens' committee, Mayor Patten, and to the local secretary, G. W. Smith; the secretary of the local committee, Mr. Rogers; to the proprietor of the Kennilworth Hotel, Mr. Rhoads, and to the Press and the citizens of Asheville in general, for the kindly interest which they have taken in their varied efforts to make its stay here in Asheville profitable, and ordering that copies of these resolutions be forwarded to the parties named.

After the installation of officers the forty-second annual meeting of the American Pharmaceutical Association was declared adjourned.

A complete report of the social features of the meeting will appear in a later issue.

What We Are Here For.

This is the legend printed on the bibulous paper covering of the programme arranged by the local committee for the members and visitors. Some of the visitors, it is rumored, felt a little shocked at the selection of bibulous paper for the cover.

Dr. Whelpley was to the fore with his Kodak.

Dr. Bartley of Brooklyn carried a Kamaret.

Polk Miller's monologue on the old fashioned dandy at the Opera House on Wednesday evening was well attended, particularly by the ladies of the A. P. A. A novel feature was introduced in the shape of a volunteer chorus to one of his songs, which received the most vociferous applause. This monologue varies in tone from grave to gay, from lively to severe, being rendered all the more interesting by reason of its contrasts of light and shadow. The fact that Mr. Miller is actually engaged in the drug business also tended to place him thoroughly "en rapport" with his audience.

The literary element was present in unusually large numbers. Edward A. Robinson of the house of Dr. J. C. Ayer, is one of the authors of the Gun-Bearer, a story of the wars founded on his own observations. To many of Mr. Robinson's friends it will be news to know that he has been a writer, and a successful one, for some years in the line of romantic fiction.

Henry R. Cheers of Plymouth, N. C., ex-president of the North Carolina Pharmaceutical Association is a tall, graceful man with black Vandyke beard and easy affable manners. Mr. Cheers was largely instrumental in inducing the association to meet at Asheville, and he was indefatigable in his efforts to render the visit so enjoyable as to justify the choice of a meeting place. That his efforts were appreciated was shown by the fact that he was voted to be the most popular gentleman at the meeting.

Edgar W. Nye the humorist-fisherman, stopped at the Battery Park hotel on Tuesday night en route to the mountains for a fishing excursion with Messrs. Chapman and Black. During the evening an informal gathering assembled at the Berkeley hotel, among whom were Mr. Nye and Polk Miller, each of whom in his own inimitable way contributed to the enjoyment of the evening. Mr. Chapman was the host of the occasion.

Henry Fox, the gifted Tennessee novelist, gave a reading on Saturday afternoon from his latest work, "A Mountain Vendetta," recently concluded in the *Century Magazine*.

Thomas a'Becket, the talented author whose name is so well known to readers of the *Century Magazine*, resides at Kenilworth Inn, where he aided Mr. and Mrs. Roades in the reception of their numerous guests. Mr. a'Becket is rather above the medium height, well proportioned and stalwart in appearance. His black moustache shows strongly out against a ruddy skin. His eyes are unusually bright and sparkling for one of his grave and deliberate manner.

Frank L. Smith, the young Asheville druggist, proved to be an indefatigable dancer and has a sweet, high tenor that sounded with bell-like clearness above the thundering choruses which occasionally floated up from the billiard room.

The aggregation of vocal talent present has been equalled at few meetings and excelled at none. Whether the chorus was that of "Muss ich den zum städt hinaus" or of "Way down upon de S'wanee Ribber" the effect was unusually fine though there were a few who would rather have heard the chorus at noon than at midnight. Some people are never satisfied.

The courtesy and attention of the Southern Railway officials to the party as they journeyed southward was most marked. The company even went to the extent of providing as a Pullman conductor a regular graduate of the National College of Pharmacy in the person of B. F. Beck, who, after six years in the drug business, laid down the pestle and took up the punch. Mr. Beck is not the only pharmacist who has taken to the road, however, for Wm. E. Sprill, Jr., now clerking for J. A. Conover at the Everett pharmacy, Jacksonville, Fla., was also a Pullman conductor. Mr. Sprill, however, found the exactions of querulous old ladies too much for his equanimity, and once, after having submitted to an unusually severe badgering for a long time, his patience became exhausted and he allowed himself to tell an old lady what he really thought, and having freed his mind he forthwith resigned and returned to the drug business. Mr. Beck's courteous attentions were recognized on the return trip, by passing a unanimous vote of thanks. He conducted the Eastern party from Washington to Asheville and from Asheville back to Washington; the three sleepers with their entire crews laying over at Asheville throughout the time of the meeting.

Read the New Advertisements.

This issue is of unusual interest to wide-awake druggists who profit by the special announcements to the trade containing descriptions of new and profitable specialties and advantageous offers for new business. The following advertisements, which are new to these pages, should be read with especial care and advantage taken of the inducements offered:

American Silver Truss Co., *The American Silver Truss*.

Bosshardt & Wilson Co., "Lucilline" Petrolatum.

Brown Chemical Co., *Brown's Iron Bit-ters*.

Campbell Cutlery Co., *Campbell's Sliding Trays*.

J. Edward Cowles, *Cowles' Cigars*.

Detroit Tobacco Co., *Cigars and Free Cash Registers*.

Frank E. Engelman, *Drug Agency, Business Opportunities*.

John C. Johnson Soda Water Apparatus Co., *Water Stills, etc.*

Dr. R. R. Lansing, *Labels and Druggists' Shelf Ware*.

Londonderry Lithia Co., *Londonderry Lithia Water*.

Minnesota University, *College of Pharmacy*.

Nelson, Baker & Co., *Pharmaceutical Preparations*.

Michigan University, *School of Pharmacy*.

Oakland Chemical Company, *O. C. Peroxide of Hydrogen*.

New York and Chicago Chemical Company, *Digestive ferments*.

Rennous, Kleinle & Co., *Brushes*.

Stearn & Gordon, *Vanilla crystals and flavoring products*.

Standard Flint Glass Works, *Homoeopathic vials*.

Schandein & Lind, *Perfumes and special offer*.

C. B. Smith and Co., *Non-secret remedies*.

Saltsburg Bottle Works Company, *Porcelain stoppered Citrate Bottles*.

Sicilian Essential Oil Company, *Pure Essential Oil*.

Vandergrift Distilling Company, *Medicinal Whiskies*.

Ed. H. Wendell, *Swiss lozenges and free binders*.

Welch Grape Juice Company, *Dr. Welch's Grape Juice*.

White Rock Springs Company, *Waukesha Mineral Waters*.

Yellow Pine Extract Company, *Yellow Pine Extract*.

with the following officers: President, Chas. Roome Parmele; treasurer, E. M. Johnson; secretary, James Carr.

One bottle "Yellow Pine Compound" contains treatment for three months. Yellow Pine Extract Co., proprietors of this remedy, will mail to any druggist blanks for names of sufferers from rheumatism, which, if filled out and sent back to them, will receive prompt attention in the way of mailing to each name, circulars and full description of remedy, with *dealers' name* as sole agent. Send postal for printed matter and showcards, to the Yellow Pine Extract Co., Allegheny, Pa.

The regular session of the University of Michigan School of Pharmacy commences in October and every student who is desirous of attending a leading college of pharmacy should procure the annual announcement of this school and make a careful study of its curriculum and requirements before definitely deciding as to where he shall matriculate for a course of study. The degree conferred by this school is that of Ph. C., and the graduates who bear this title are well known in the pharmaceutical world from their contributions to scientific literature and their general good standing. The annual announcement of the school can be had upon request to the secretary, Prof. A. B. Stevens, Ann Arbor, Mich.

Our Western readers are reminded of the address of the Chicago supply depot of the Dr. Beeson Fond du Lac Vaccine Co., 1402 Security Building, Chicago, Ill. The vaccine virus of this Company has been adjudged exceptionally pure by the authorities of the Rush Medical College. In a report by Prof. Walter S. Haines, M.D., of the chemistry department, issued under date of August 3, is found the following: "The process of preparing Vaccine Points was carefully observed as performed by Dr. Beeson and was found to be done with antiseptic precautions. Seven inoculations were made on nutrient agar-agar from the serum as it flowed from two different cows and brought to Chicago for further examination, which showed a total absence of disease producing microbes." No higher testimony than this can be brought forward to establish the value of a vaccine virus and druggists should carefully note this particular brand for future reference and use in ordering from wholesale dealers.

A cut of the Remington Still is shown in connection with the advertisement of the John C. Johnson Soda Water Apparatus Company of 284 North 18th street, Philadelphia, which appears in this issue. In point of mechanical construction, the apparatus for the distillation of water and hot soda which are referred to in this advertisement are of particular excellence, the John C. Johnson Soda Water Apparatus Co. making a special feature of the manufacture of ingenious mechanical appliances for the pharmacist. The hot soda season is coming around again and an advertisement of apparatus for its production is therefore timely. Retail druggists do not need to be told of the necessity of employing first-class apparatus in pharmaceutical operations and it will be only necessary to mention this advertisement to secure for it the attention it deserves. All who contemplate introducing this popular beverage to their soda fountain patrons will do well to order a hot soda apparatus of the Johnson pattern. Address as above, mentioning this paper.

Trade Mention.

The magnificent steam yacht Ituna belonging to Alanson Armour of Chicago, put in at Portsmouth, N. H., the other day to have her medicine chest refitted by Andrew P. Preston, pharmacist and maker of the "Famous Portsmouth Specialties."

We learn that the action brought in the United States Supreme Court by B. T. Hoagland's Sons against H. K. Gayetty and G. H. Conant to restrain them from using the name of H. K. Gayetty on the labels of medicated paper, has been dismissed at the request of the complainants, with no compromise.

E. M. Johnson & Co., manufacturing chemists, 38 Platt street, New York, widely known as the manufacturers of "Arsenau" and other medicinal preparations of gold, are succeeded in business by the Chas. Roome Parmele Company,

Autumn Sellers.

In view of the near approach of the holiday season, the announcement of Schandeln & Lind regarding their "Gardenia" and "Sweet Scented Shrub" possesses special interest for the retail pharmacist. In order to bring these favorite odors more prominently to the attention of the retail trade the makers, Schandeln & Lind, 585 Arch street, Philadelphia, Pa., offer to give away free with a pint of either odor a hand-painted glove box containing one-half dozen bottles of the 25 cent size. This is an unusually liberal offer and should receive a large response. Another offer made by this firm with a view of increasing the popularity of their goods is to present to each purchaser of one pint each of "Gardenia" and "Sweet Scented Shrub," a handsome silk-covered hand-painted handkerchief box containing one dozen bottles of perfume put up to retail at 25 cents each. The price per pint for the above-named odors is \$4. and as a profit from each transaction is assured, no druggist should hesitate about making the investment. The advertisement of Schandeln & Lind, on page 3 of this issue, contains an illustration, showing the different containers, and giving particulars of the special offer. A card to the makers, mentioning this journal, will bring additional particulars.

Fountain Chocolate.

If a census were taken of the most popular soda water flavors, it would be found that "Chocolate Soda" is considered the leader among these beverages, and is favored by far the largest number of soda fountain patrons. The drug store that is known to dispense good "chocolate" usually has the call for that and other beverages of its kind. The business bringing properties of good soda are, of course, well known. This leads us to mention that "Phillips' Fountain Chocolate" has won its way steadily into favor as one of the most satisfactory chocolates on the market. The druggist who uses "Phillips' Chocolate" knows that his syrup will always be of equal flavor and uniformly good, and this confidence in its excellent quality is one reason why it is found in nearly every drug store throughout the country. Send to the Charles H. Phillips Chemical Co., 77 Pine street, for free ¼ lb. sample.

A New Silver Truss.

A truss that will retain a hernia, while the wearer is exerting himself in his ordinary avocation has long been a desideratum. The American Silver Truss manufactured at 290 Main street, Buffalo, N.Y. will, it is stated, adapt itself to every movement of the body, and retain the hernia in position no matter how severe the strain. This truss has certainly the advantage of neatness and light weight, and is a great improvement on many of the prevalent styles. A cut showing its appearance when adjusted to the body can be seen on reference to the advertisement in this issue.

Hoarse in the Throat.

George D. Feidt & Co., Manufacturing Chemists, Philadelphia, have a striking announcement in this issue regarding their "Hoarse in the Throat." They offer to include with an order for one gross of these quick-selling articles an artistic engraving 16 by 20, framed, of "Pharaoh's

Horses," by Herring, enough cartons to fill your display windows, and a lot of posters and display cards free. A sample of the "Hoarse in the Throat" can be obtained free of cost by any druggist making application to George D. Feidt & Co., Manufacturing Chemists, Philadelphia.

A new edition of "Helbing's Modern Materia Medica" appears simultaneously with the issue of this journal. The new edition excels former editions in size and contents, and the index contains over eight-hundred references, forming an unbridged reference book of new remedies and synonyms. The published price is \$2.00, and the book can be had through the American Druggist Publishing Co., any wholesale or jobbing druggist, or direct from the publishers, Lehn & Fink, 128 William street, New York.

Goods to Push.

BY A SUCCESSFUL DRUGGIST.

Every year brings out new candidates for public favor; and if a druggist is on the alert, he can soon ascertain what goods he wants to handle. He never wants to push an article that there is no money in, nor, on the other hand, one without merit. But where he can get hold of anything meritorious and profitable, he can afford to recommend it, as he is sure of having the hearty cooperation of his customers and a satisfactory balance sheet at the end of the year. Now most of all our leading retail druggists, in the large cities especially, manufacture something of merit that it would be advantageous to the trade to push, as the goods would not be subject to the everlasting cut, and which by a little effort would obtain large sales. These preparations will readily occur to the professional brethren, and I advise casting aside petty jealousies and selling such others' products that shall meet the hearty favor of the public and redound to our mutual advantage. I am led to these reflections by noting the results I have had with the White Rock Ozonated Lithia Water for the last year. Following out my general plan, adopted so many years ago, of looking out for new goods of absolute merit that it would pay me to handle and on which I could eventually build up a big trade, I was induced to investigate this remedy and with most gratifying results in every respect. I was not long in ascertaining through my customers, that the water had great healing properties; and I took a lively interest in pushing it; and without a single exception have my customers not only spoken in the highest praise of it, but have taken a personal interest in recommending it to others. It is the most satisfactory article I ever handled, and I strongly urge my fellow druggists, that if they have customers suffering with rheumatism, gout, gravel, diabetes, Bright's disease or any kidney complaints, to recommend the Ozonated Lithia Water.—M. M. R. for August.

The Best Liquid Food

When properly pushed the sale of Grape Juice either as a medicinal tonic or as a soda fountain beverage affords gratifying profits. Among the old established firms who give their whole time to the manufacture of a palatable and highly flavored juice none compares to better advantage than the Welch Grape Juice Company of Vineland, N. J., who are so widely known in this country as the bottlers of "Dr. Welch's Grape Juice." In their advertisement in this issue attention is directed

to the analysts' report, which concludes that "No liquid food has brighter prospects than Grape Juice, and none we have examined compares in flavor and body Dr. Welch's, prepared from the rich concord grapes grown in Vineland. For the aged and feeble for nursing mothers and delicate children it is unsurpassed. It is the tonic *par excellence* for all stomach and liver troubles." With the object of securing a still wider sale for their Grape Juice, the Welch Grape Juice Co., are sending out sample bottles of their product with circulars and trade prices to all in the trade who make application. Inclose a printed address slip and mention the AMERICAN DRUGGIST.

Reliable Non-Secrets.

A very salable line of non-secret remedies is put up by C. B. Smith & Company, wholesale druggists, 863 & 865 Broad street, Newark, N. J. Such staple preparations as sarsaparilla compounds, emulsion of cod-liver oil, syrup tar, tolu and wild cherry are among the numerous preparations which this firm are prepared to supply with the name and address of the retailer conspicuously displayed on the package. Any of our readers who wish to meet the competition of dry goods stores can best effect it by ordering a supply of the different compounds prepared by C. B. Smith & Company. You will lose nothing and may gain a great deal by sending for a complete price list of over one hundred preparations, whose sale, it is urged, will afford the pharmacist a wholesome profit. Use a postal card, mentioning the AMERICAN DRUGGIST.

Whooping Things Up!!!

The Brown Chemical Co., of Baltimore, the owners of the old reliable remedy, Brown's Iron Bitters, which has been extensively sold for over twenty years, believe that the hard times are over and have commenced pushing their medicine more largely than ever before. To assist the druggists in making ready sales and help them make more profit on Brown's Iron Bitters they are giving away for a limited time a quantity of the most novel and unique soap, which will certainly create attention and comment. Their offer is fully described in their full page advertisement appearing on page 80 of this issue.

"Fake Formulas."

The most outrageous steal, and at the same time the meanest and most contemptible, ever perpetrated on the retail druggists is the sale, at exorbitant prices, of so-called "Soda Water (Guides)." These books, without exception, so far as we have seen, are a hodge podge collection of mixtures that make miserable messes of sloop when used at the fountain. They recommend solution of soap tree bark for a foam holder, when it is, as everyone knows who has tried it, a bitter, nasty, nauseating stuff that sickens many customers. They direct lemon syrup to be made with oil of lemon and solution of citric acid. (Good Lord deliver us!) And so on for quality, the quantity is all there. Our advice is to let these frauds alone, don't touch 'em.—Indiana Pharmacist.

Herbert Church, proprietor of the L. W. Booth & Co. pharmacy, Bridgeport, Conn., whose serious illness was recorded in our last issue, has since died. He had been ailing for some time with ulceration of the intestines, and passed away at the age of 83.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Red Coloring for Kerosene.—W. A. P.—Alkanet root will be found useful for imparting a deep rose tint to kerosene oil.

Essence of Pepsin.—J. G. F.—For formulas of essence of pepsin and lactopeptine, see the National Formulary, formulas No. 186 and No. 319 respectively.

Book on Fluid Extracts.—W. H. F.—The U. S. Pharmacopoeia and Dispensatories contain full particulars regarding the manufacture of fluid extracts. See also Remington's Pharmacy.

Pimple Cure.—C. H. M. writes: "Please give a formula for removing pimples from the face without injuring the skin."

We cannot undertake to prescribe medical treatment in these columns. Our correspondent should consult a physician.

Essence of Cucumber.—H. J. M.—This is simply a tincture of the vegetable. It may be made after the following formula:

Cucumbers.....	1 lb.
Alcohol.....	so fl. ounces

The peeled and sliced cucumbers are macerated in warm alcohol until the full flavor of the pepo is extracted.

Home for Epileptics.—"Subscriber" is referred to our issue of August 10, page 111, for information regarding the establishment of a colony for epileptics. The new colony there referred to is under state supervision. Regarding private institutions for the treatment and care of epileptics, "Subscriber" can be recommended to the "New York Home for Epileptics," Durhamville, N. Y., Dr. J. E. Bowman, Medical Superintendent.

S. & B. Cough Drops.—M. F.—A preparation similar to "S. & B. Cough Drops" may be made by adding to 1 pound of rock candy and 1 pound of sugar, mixed and boiled to the proper consistency for making drops, a mixture composed as follows:

Tartarated antimony.....	30 grains
Tincture of opium.....	1 ounce
Oil of anise.....	1/2 ounce
Oil of wintergreen.....	1/4 ounce

Color with caramel.

Barbed Wire Liniment.—A. P. S.—We regret that we are unable to supply a formula for a liniment of this description. If the name is an indication of its character, it is evidently something far removed from a soothing embrocation. To be serious, however, we would refer our correspondent to the

very excellent series of veterinary formulas which have appeared in recent issues of this journal, from Dieterich's "Pharmaceutical Manual." (See AMERICAN DRUGGIST xxv. 3. p. 9; xxv. 4. p. 41.)

"Acid Nitrate of Mercury."—E. H. writes: "I would be obliged for information as to how to prepare a solution of acid nitrate of mercury for removing warts."

The preparation commonly used is that official in the U. S. Pharmacopoeia under the title *Liquor Hydrargyri Nitratii*. This is made by dissolving 40 grammes of red mercuric oxide in a mixture of nitric acid and water composed of 45 grammes of the former and 15 grammes of the latter.

A Discolored Mixture.—T. A. L. writes: "Please advise me if anything can be added to the subjoined prescription so that the solution will keep and not turn dark:

Potass. bicarb.....	.....
Acid salicylic M.....	3 iv
Aqua dest. q. s. ad.....	3 iv

The darkening complained of is probably caused by traces of iron in the water. If the water is distilled out of contact with that metal the change of color is less quickly brought about. It is difficult to suggest a means of retarding the change. If care is observed to use a good quality of acid and keep all the ingredients entering into the prescription away from contamination with iron, it is the most that can be done. A solution of this kind will keep better if the proportions of acid and alkali are so arranged as to provide for a slight excess of acid.

Soda Water Syrup Formulas.—D. E. L. writes: "Can you recommend to me a first class book of formulas for hot and cold soda water syrups.

A good variety of useful formulæ is contained in Dubelle's "Soda Fountain Requisites," published by Spon & Chamberlain, this city. Harrop's "Monograph on Flavoring Extracts" is also a book that can be recommended. Then there are a number of desirable little manuals sent out gratuitously by different firms of manufacturing pharmacists and makers of soda fountain requisites. A note addressed to any of the firms who advertise such goods in the AMERICAN DRUGGIST will usually bring a useful supply of literature bearing upon the subject. As examples we may mention the names of Hance Brothers & White, Philadelphia, J. W. Tufts, Boston, and Smith & Painter, Wilmington, Del.

Hostetter's Bitters.—J. A. H. has experimented with the formula for this compound given in our issue of August 10. He believes he can improve upon the formula quoted and suggests the following:

Orange peel.....	.....
Gentian & A.....	§ ii
Rhatany.....	§ i
Nutmeg.....	3 i
Cinnamon.....	3 i
Cloves.....	3 ss
Allspice.....	3 i
Dilute alcohol.....	Cviii

The drugs are reduced to coarse powder and macerated with the dilute alcohol for four days, at the end of which

time the tincture is filtered through paper.

New York and Brooklyn Board Meetings.—H. M.—The next meeting of the New York County Board will be held on Monday, September 3, in the College of Pharmacy of the city of New York. The Brooklyn or Kings County Board meets on the last Thursday of each month, July and August excepted. Applications to the New York board should be addressed to Dr. Balser, 218 East 13th street, New York city, and to the Brooklyn board to L. T. Perkins, 19 Greene avenue, Brooklyn.

Invisible Inks.—F. A. L.—Numerous formulæ for invisible inks have been printed in these columns. Reference to the file of the last volume will discover an article on "Sympathetic Inks" (AMERICAN DRUGGIST, xxiv, 19 p. 250) which contains many useful suggestions for formulas. For the convenience of new subscribers, however, we give below a series of formulas collected from different sources:

MAGIC BLUE INK.

Cobalt chloride.....	50 grains
Glycerin.....	o minims
Distilled water.....	fl. ounce

Dissolve the cobalt chloride in the distilled water and add the glycerin.

Writing executed with this ink is invisible on paper, but on warming the writing turns blue. On exposure to damp air, it becomes again invisible.

MAGIC BROWN INK.

On dissolving 1 part of potassium bromide and 1 part of copper sulphate in 20 parts of water, and writing with the solution on paper, very careful heating will turn the writing brown.

YELLOWISH GREEN.

Writing done with a solution of 2 parts of potassium chromate, 2 of nitric acid, 2 of sodium chloride in 40 parts of water turns yellowish green on gentle warming.

The Cultivation of Coca and Hemp.—A. A. H. asks if the coca plant can be grown for medicinal purposes in this latitude, and requests information as to where seeds or shoots can be obtained.

The plant will grow very readily in a common greenhouse under ordinary treatment, providing the temperature is not allowed to drop too low. If a locality could be found in the United States where the variations of climate would not differ too greatly from those which exist in the home of the coca, the cultivation of the plant might be attempted on a large scale; but no such place has yet been discovered in this country and coca cultivation has heretofore only been carried on in an experimental way in greenhouses. Shoots of the plant can be purchased from Pitcher & Manda of the United States Nurseries, Short Hill, N. J., at the price of 75c each.

For medicinal purposes cannabis indica cannot be successfully cultivated anywhere out of Western and Central Asia, where it is indigenous to the soil and thrives vigorously. It has been cultivated in this country on a small scale by different experimenters, but we are unable to say whether or not the

plant so cultivated has ever yielded resin. Flückiger is authority for the statement that *cannabis indica* has been naturalized in Brazil north of Rio de Janeiro and is cultivated in many parts of continental Europe. The resin-secreting glands with which the plant is provided have been found to be numerous in proportion to the altitude of the place of cultivation; and the best is recognized to be that brought from the Laos country in the Malaya Peninsula. The chief source of the hemp used in medicinal extracts, etc., is British India. The plant finds its way into the market in two forms: (I) *Bhang*, consisting of the dry leaves and small stalks, and (II) *Ganja*, which consists of the stems and flower stalks of the female plant.

Violette's Chemistry.—McM. & Co.,

write: "We are in need of a work in chemistry by Violet, a French chemist. Can you give us any information as to where we could get one?"

The following are the only works we can find note of answering to this query:

Violette, J. M. H. *Dictionnaire des analyses chimiques*. 2d. ed. 1859, 2 vol. 8 vo.

Violette, Charles. *Etudes sur la saturation*, 1867.

Violette, Henry. *Guide pratique de la fabrication des vernis*, 1866.

Violle, Jules. *Cours de physique*, 1888-92. 2v. (To be 4 vols.)

We can find nothing more recent by any author of the name. Any of the books named can be procured through Gustav E. Stechert, 810 Broadway, New York.

physicians to do so with equal force? Give us *absolute* protection and we will cheerfully be taxed for the legitimate expenses of such protection.

C. L. FREDERICK.

CARTHAGE, N. Y.

Registration on the Pacific Slope.

Editor AMERICAN DRUGGIST:

The question of raising funds to successfully conduct the business of the several boards of pharmacy throughout the country, has perhaps not affected us so seriously as it has some of the boards of the Eastern States. While our law may be defective in some respects, and requires certain amendments, which it undoubtedly does, I believe it provides the only practical means of raising a revenue sufficient to meet all the requirements of the board. We have an examination fee of \$5, and an annual renewal fee of \$2 for registered pharmacists, and \$1 for registered assistants. With the funds raised in this manner we have gotten along without embarrassment.

In some of the more populous Eastern states a single registration fee of ten or fifteen dollars might possibly be sufficient, but in the sparsely settled Western States, and especially the larger ones, like Washington, where it becomes necessary for some of our members to travel from two to three hundred miles to attend a meeting, the conditions are different, and the result of attempting to keep up our revenue with a single fee I fear would be disastrous. I will admit there are strong arguments against an annual renewal fee.

The question is often asked "If a pharmacy law is enacted for the protection of the public, should not the people at large and not the druggists alone be taxed for its maintenance?" I answer emphatically, *yes*. But is it practical? We all know legislators are slow to make a law that will have even the appearance of adding to the burden of the taxpayer.

W. H. T. BARNES.

SEATTLE, Wash., 1894.

Bibliography.

HANDBOOK OF THE UNITED STATES TARIFF, containing the Customs Tariff Act of 1894, with complete schedules of articles with proper rates of duty; also a full explanation of customs requirements, and of the laws and regulations regarding drawback with a list of articles on which drawbacks have been established. Philadelphia: F. B. Vandegrift & Co., 50 South Fourth street, New York: 27 William street.

This is a copy of the Tariff Bill passed by Congress on August 18th, giving the rate of duty, paragraph of the law and decisions of the courts, general appraisers, and Treasury Department; also, a complete list of articles on which drawback has been allowed, with the amount of wastage. It also contains a table of foreign coins with values as proclaimed by the Director of the Mint; a foreign express tariff; the administration law and other law on the administration of the customs service.

An Irish chemist is advertising in a Belfast paper that he keeps "natural mineral waters by the best makers always in stock!"



Producing Ice on a Small Scale.

Editor AMERICAN DRUGGIST:

We notice an article in your last issue (page 139) on "Producing Ice on a Small Scale," as described by Prof. Liebreich in the *Therapeutische Monatschrift*. In regard to this we beg to say that we have ordered a supply of these machines and expect to have them here very soon.

We were prompted to order this machine by the advice of several prominent physicians, and we shall take pleasure in informing you upon their arrival.

Yours very truly,

OSCAR LEISTNER & Co.,
Importers of Druggists' Sundries.

New York, 621 Broadway.

Look Out for This Impostor.

Editor AMERICAN DRUGGIST:

Will you have the kindness to publish in your next issue the following for the benefit of your readers in this section:

Some one, variously reported to us as being sometimes a man and at other times a woman, is engaged in swindling the druggists of this State and vicinity by offering Throp's Rheumatic Remedy or Duryea's Dyspepsia Cure, which, we are informed by some of our friends, appears to be nothing more than colored water, and the sale of which is made more or less easy by exhibiting a typewritten letter purporting to be from us, advising the trade to buy and offering that if the goods are not sold in a certain limit of time, we, Smith, Kline & French Co., will refund the money on return of the goods, or exchange for other goods. We have never written such a letter, and from reports that have reached us believe that the party presenting the same is a fraud, and should be dealt with accordingly. They some time ago claimed to have their headquarters in Cumberland,

Maryland, but on addressing a letter to the postmaster there we were informed that no such party was known there. Their labels now read Hazelton, Penna.

SMITH, KLINE & FRENCH Co.

M. N. KLINE, Treasurer.

PHILADELPHIA, PA., Sept. 6.

The Country Druggist Should be Protected.

Editor AMERICAN DRUGGIST:

Regarding the re-registration proposition, I think that G. W. Ostrander, of Richmondville, N. Y., hits the nail on the head and expresses the feelings generally if not universally of the country pharmacists.

We have absolutely no protection from the cormorants who are sapping the profits of the retail drug trade.

Why not make it illegal for any but a licensed pharmacist to sell any kind of a poisonous article or medicines of any description—so called "patent" or otherwise, in places where there are such pharmacists doing business. That would be sensible and genuine protection. Dry goods and grocery stores in the country sell Paris green and other poisonous drugs with as much impunity as a yard of tape or pound of sugar, and pay no fee nor know any law.

The present laws are little good for the pharmacist and are continually hedging him with restrictions that are almost always complicated and vexatious without bringing him any benefit. New laws are yearly made to prescribe his limits, seemingly with a desire to kill him entirely. He is constantly kicked and abused, lied about regarding substituting and other fake notions—classed as belonging to the scoundrel fraternity, until it is about time for them to rise in their might and throw concentrated ammonia upon the burglars seeking to rob them of their good name. As to re-registration! Why not require

Caspari's Pharmacy.

Among the books just about to be issued is a text-book on pharmacy, for students and pharmacists, by Charles Caspari, Jr., Ph. G., Professor of the theory and practice of pharmacy in the Maryland College of Pharmacy, Baltimore, recently elected secretary of the A. P. A. It will appear in one handsome octavo volume, thoroughly illustrated from the press of Lea Bros. & Co., of Philadelphia.

The author's chief aim is to give students a clear understanding of the numerous operations and the apparatus used in pharmacy both in dispensing and in manufacturing and to point out difficulties which may be met and modes of obviating them. The Pharmacopoeia is carefully analyzed and thus rendered more intelligible and useful to pharmacists. Dispensing operations are amply considered, and pharmaceutical chemistry receives that full treatment which the present status of science demands.

The author is widely known as joint editor of "The National Dispensary," as Professor of Pharmacy in one of the foremost pharmaceutical colleges in America, and as a member of the Committee on Revision of the new U. S. Pharmacopoeia. He is therefore exceptionally qualified to prepare a work of the highest merit as a text-book for students, that as a practical work of reference for pharmacists in all the multifarious details of their operations, this volume will possess the value assured by an experience of twenty-five years. Modern in every particular, convenient in size through avoidance of obsolete and unnecessary matter, richly illustrated and issued at a reasonable price, "Caspari's Pharmacy" seems assured of immediate popularity with pharmacists and of adoption as a standard text-book for pharmaceutical students. It will be issued in ample season for the fall terms of the colleges.

Pamphlets, Etc., Received.

Asepsis in Minor Procedures, by Hunter Robb, M.D., of Baltimore. Reprinted from the *Maryland Medical Journal*, May 19, 1894.

Notes on Gynecological Technique, by Hunter Robb, M.D., Associate in Gynecology, Johns Hopkins University, Baltimore, Md. Reprint from the *New York Journal of Gynecology and Obstetrics*.

Twenty-seventh annual announcement of the Montreal College of Pharmacy. Session 1894-95. Montreal, 595 Lagache-tiere street.

Annual announcement of the University College of Medicine, Richmond, Va. Departments: Medicine, Dentistry, Pharmacy. Sessions 1894-5.

Annual announcement, 1894-5, Department of Pharmacy, Scio College, Scio, O.

Tenth annual announcement of the Department of Pharmacy of the State University of Iowa, Iowa City, Ia. 1894-95.

Practical Application of the Principles of Sterilization, by Hunter Robb, M.D., Associate in Gynecology, Johns Hopkins University, Baltimore. Reprinted from the *American Journal of Obstetrics*.

ICHTHYOL IN FISSURED NIPPLES.

[Dr. OCHREN.—*Therap. Monats.*]

Ichthyoli.....3 j
Lanolini.....ss Div
Ol. amygdal. dulc.....gr. xv
Misce ft. ung.

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensary, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Second Series Questions.

11. Sialagogue, an agent which increases the flow of saliva as dilute acids, mercury salts, etc.

12. Abortifacient—a medicine used to produce abortion, as ergot. Antidotes: use stomach pump or tube, empty the stomach by a mustard or sulphate of zinc emetic, or give a subcutaneous injection of apomorphine. Give a purgative such as castor oil or one drop of croton oil and assist its action by copious warm drinks. Tannic and gallic acids have been recommended. After the bowels have acted well, give small doses of opium at intervals. Dr. Murrell recommends for poisoning by ergot, $\frac{1}{2}$ grain doses of nitroglycerin every 15 minutes. The patient should be laid in a recumbent position and the circulation should be maintained by warmth, and if necessary by friction.

13. An anaesthetic is a remedy which has the power of rendering the recipient insensible to pain, as chloroform, ether, etc.

14. An antihidrotic is a remedy that tends to restrain or prevent profuse perspiration, such as aromatic sulphuric acid.

15. An antiphlogistic is a medicine (or a diet) which tends to check inflammation or excitement of any part or parts of the system. This action is brought about by various means; by purgatives (especially saline purgatives) refrigerant diaphoretics, sedatives, promotion of the secretions, a low diet, opiates, water internally and externally, cold applications, etc.

16. Carminatives are medicines that allay flatulency and spasmodic pains, as anise, caraway, cardamom, cassia, cinnamon, ginger, peppermint, peppers, whiskey or brandy and most aromatic essences.

17. Cholagogues are medicines which have a tendency to increase the flow or evacuation of bile; such as mercurials, aloes, leptandra, iris versicolor, etc.

18. Diaphoretics are medicines that tend to increase the perspiration, such as antimonial powders, camphor, ipecac, wine, the citrates, acetate and carbonate of ammonia.

19. Diuretics are medicines which tend to promote the secretion of urine, such as, juniper, sweet spirit of nitre, turpentine, squills, etc.

20. Aperients are medicines which gently open the bowels, such as senna, seidlitz-powder Rochelle salte, etc.

Questions Fifth Series.

CHEMISTRY.

41. What is the distinguishing test between ferric and ferrous salts? Name some preparation in the manufacture of which this test is applied.

42. Explain the theory of the structure of alkaloidal salts, in so far as it applies to the union of an alkaloid with an inorganic acid.

43. What is meant by a decinormal acid solution?

45. How would you make a centinormal soda-solution?

46. How and for what purpose is methyl orange used in analysis?

47. What is litmus, how is it prepared for use and how used?

48. What vegetable indicator is used for alkalis?

49. What is meant by the term neutralization as between an acid and an alkaline substance?

50. How do acid salts generally react to litmus paper.

Names of Students whose Grade stood 75 on the Second Series.

E. Q. Anewalt, Philadelphia, Pa.
H. J. Barber, Alton, Ontario, Canada.
Frank Hartman, Middletown, Conn.
Henry E. Garthoffner, Booneville, Mo.
C. J. McCloskey, Jersey City, N. J.
J. H. Pratt, Birmingham, Ala.
Will A. Sickel, Snowshoe, Pa.
C. P. C. Timbermann, Alexandria, Va.
A. D. Townsend, Randolph, Neb.

Wool Fats.

Wool, writing upon wool fat,—namely, lanolin, adeps lanæ, cæsupus,—holds that this is better borne in the great majority of cases than any other fatty preparation, not excepting resorcin, since it never dries and does not decompose. The paste he employs is made up of equal parts of cæsupus, zinc oxide, and olive oil. When adeps lanæ is employed, the most suitable combination is as follows:

	Parts.
Adeps lanæ.....	15
Zinc oxide.....	10
Olive oil.....	5

Adeps lanæ is admirably adapted for the making of mercurial ointment, according to the following formula:

	Parts.
Hydrarg.....	30
Adeps lanæ.....	50
Benzoe.....	10
Ol. bergamot.....	3

In the treatment of seborrhoea the author employs the following prescription:

	Parts.
Resorcin.....	5
Ol. ricini.....	15
Balsam of Peru.....	3
Spiritus vini.....	77

This is used in the morning, and in the evening there is rubbed into the head,—

Adeps lanæ.....	40 parts
Ol. amygdal.....	5 parts
Sulph. præcipitat.....	5 parts
Oil of rose.....	1 drop

—*Anal. de la Polioclinique*, No. 20, 1894.

Student's Column.

Organic Materia Medica of the U. S. P.

(Continued from page 152.)

Fel Bovis. Oxgall; ox-bile.

ZOOLOGICAL NAME.....*Bos Taurus*
 ORDER.....Ruminantia—Class, Mam-
 malia.
 HABITAT.....United States, etc., etc.
 CONSTITUENTS.....Coloring matter—bilirubin;
 fatty matter—cholesterin; glauchole and
 tarcolate of soda.
 PROPERTIES.....Tonic laxative.
 PARTS USED.....The fresh bile freed from
 mucus by treatment with alcohol.

Dose—Gm. 0.60 of the purified oxgall.

Ficus. Fig.

BOTANICAL NAME.....*Ficus Carica*.
 NATURAL ORDER.....Urticaceae.
 HABITAT.....Western Asia from Asia
 Minor and Syria eastward to Lake Aral;
 Southern Europe.
 CONSTITUENTS.....Sugar (6.5 per cent.);
 water, gum, fat and saline constituents.
 PROPERTIES.....Laxative and demulcent.
 PARTS USED.....The dried fruit

Dose—Ingredient in *Comp. Semine*.**Foeniculum.** Fennel; fennel fruit; fennel seed.

BOTANICAL NAME.....*Foeniculum Capillaceum*.
 NATURAL ORDER.....Umbelliferae.
 HABITAT.....Southern Europe.
 CONSTITUENTS.....Fixed oil (13 per cent.);
 Volatile oil (2 to 4 per cent.); sugar.
 PROPERTIES.....Aromatic stimulant.
 PARTS USED.....The fruit.

Dose—Ingredient in *Pulv. Glycyrrhis. Comp.***Frangula.** Frangula; buckthorn; alder buck-
thorn.

BOTANICAL NAME.....*Rhamnus Frangula*.
 NATURAL ORDER.....Rhamnaceae.
 HABITAT.....Northern coast of Africa;
 Europe and Siberia.
 CONSTITUENTS.....Active principle, frangu-
 lin; yellow resinous principle, tannin, etc.
 PROPERTIES.....Laxative, but seldom used.
 PART USED.....The bark collected at least
 one year before being used.

Dose—*Fid. Extract* Cc. 2-4.**Galla.** Nutgall.

BOTANICAL NAME.....*Quercus lusitanica*.
 NATURAL ORDER.....Cupuliferae.
 HABITAT.....Asia Minor, Persia, Africa.
 CONSTITUENTS.....Tannin or gallotannic acid.
 PROPERTIES.....Powerful astringent to
 mucus surfaces.
 PARTS USED.....The excrescences caused
 by the punctures and deposited ova of *Cynipis*
Galla tinctoria (class Insecta; order Hymen-
 optera).

Dose—*Tinct.* Cc. 2-8. Ingredient in *Ung. Galles*.**Gelsemium.** Gelsemium; yellow jasmine.

BOTANICAL NAME.....*Gelsemium sempervirens*.
 NATURAL ORDER.....Loganiaceae.
 HABITAT.....Southern United States.
 CONSTITUENTS.....Gelsemine (alkaloid); gel-
 semic acid.
 PROPERTIES.....Nervous depressant; my-
 driatic; febrifuge.
 PARTS USED.....The rhizome and roots.

Dose—*Ext. Ad.* Cc. 0.30-0.60; *Tinct.* Cc. 0.60.**Gentiana.** Gentian.

BOTANICAL NAME.....*Gentiana lutea*.
 NATURAL ORDER.....Gentianeae.
 HABITAT.....Mountainous regions of
 Southern and Central Europe from Portugal
 eastward to Bosnia and as far north as Central
 Germany.
 CONSTITUENTS.....Gentiopterin (bitter princi-
 ple); gentianin (gentianic acid) Resinous mat-
 ter associated with a bitter principle giving,
 according to Prof. Fatch, a greenish black
 color with ferric chloride.
 PROPERTIES.....Bitter tonic.
 PART USED.....The root.

Dose—*Ext. Gm.* 0.15-0.60; *Ext. Ad.* Cc. 2.
Tinct. Cc. 4-8.

(To be continued.)



NEW YORK.

Frank D. Otis, of C. G. Bacon & Co., has just returned from a two weeks' vacation at Monticello, Ulster County, where he spent the major portion of his time bicycling. Mr. Otis has become an ardent devotee of the wheel.

Emil Utard, New York agent of Carenon & Son, Zaragoza, Spain, manufacturers of the well-known "Figaro" brand of liquorice, sticks and pellets, has returned from the sea side from a rest and recreation, following a long period of duty.

The New York branch of the Low Art Tile Co., in the Havemeyer Building, 31 Church and 26 Cortlandt streets, is now under the sole management of J. A. Sangston, G. M. Howell, who was formerly associated with Mr. Sangston, having retired from the business.

A bottle of alcohol in the show window of the drug store of McElhenie & Marsland, at the corner of Ryerson street and DeKalb avenue, Brooklyn, exploded the other day and blew out the window, causing \$150 damage. It is supposed the vapor from the alcohol became ignited from the gas-jet.

A damijohn of some fermentable matter, the exact nature of which is unknown, exploded a few days ago in the storeroom of McKesson & Robbins, wholesale druggists, Fulton street, and blew out two windows. A dazzling burst of flame accompanied the explosion. A member of the firm told a representative of the AMERICAN DRUGGIST that the damage was trifling, amounting to less than \$300. He professed to be unable to account for the explosion or to give the exploding substance a name.

The New York woman's taste for chocolate soda water revives with all the strength of unconquerable thirst on Sept. 1st. During June, July and August, orange phosphate and orange syrup, lemon syrup and strawberry are her choice of flavors and mixtures, but with the coming of autumn chocolate ice cream—and the more ice cream the better—is her favorite cold drink. Now a man with an inordinate curiosity for statistics has found that on upper Broadway alone, by which is meant the shopping district, something like 10,000 glasses of ice cream soda are imbibed daily, and chiefly by women. At one fountain in this region, famous for the excellent quality of its soda, one attendant confessed to selling as many as 1,000 glasses of the chocolate mixture in an hour after the theaters let out. At another fountain, equally famous, but a little lower down on the street, the daily sales of ice cream soda during the winter months run up as high as 4,500 glasses.

J. Fred. Windolph, the Brooklyn druggist whose clever letter to City Clerk Benjamin anent the licensing

of an imaginary canine was printed in our last issue, has again distinguished himself and won far reaching notoriety in the daily press.

Shortly after he had retired to his bedroom in the rear of his store, at an early hour, on the morning of August 27, he heard a noise and some voices at the front door. Supposing a customer was on hand he arose, and shoving aside the curtain which separated his room from the store, looked over the medicine counter toward the door. He was surprised at seeing a young, short, slim fellow dangling by his hands on the inside of the door from the fanlight, and shouted to him to get out. The burglar dropped to the floor and began to fumble about the lock, at the same time carrying on a whispered conversation with his outside accomplice. In less than half a minute the outside burglar had also got through the fanlight and joined his companion in the store.

From the start Mr. Windolph had realized that he was in a tight place, and the presence of the second burglar urged him to speedy action in the way of self-defense. As he had no pistol or other ordinary weapon at hand he had recourse to a big bottle of concentrated ammonia, which stood within his reach on the medicine counter. Removing the stopper from the bottle he poured half of the contents into a glass graduate, and then, after sending out two calls on his burglar alarm, awaited developments. While one of the burglars was at work on the money drawer the other, who was the first to enter the store, made his way to a small door which opens into the rear of the medicine counter. This one was just within two feet of the druggist when the contents of the glass flew through the air and landed square in his face. A pistol bullet could scarcely have been more effective for the instant. The victim of the ammonia deluge gave a shriek, threw up his hands, and fell to the floor apparently unconscious. Mr. Windolph refilled the glass from the ammonia bottle and turned his attention to the other marauder, who tried to climb to the fanlight, but slipped and fell to the floor. At this instant the first burglar partly regained his senses, and staggering through the store, dived head first through the plate-glass window into the street. His companion followed close in his tracks, receiving the second shower of ammonia on the back of his head as he disappeared through the hole in the window.

The first burglar was still so dazed from the effects of the ammonia that he was easily captured by some passers-by, who responded to the druggist's calls for help, but the other escaped. These men are supposed to have robbed L. Trites' store at 670 Fulton street on Saturday night. It was entered in the same way and cigars, stamps and money to the amount of \$50 were stolen.

MASSACHUSETTS.

BOSTON, Sept. 5.—The short experience of three months with the new law which places the control of the licensing of druggists in the hands of the pharmacy commission has demonstrated the fact, beyond a doubt, that this act will greatly increase the duties of the members of the board. It is a question, indeed, if with the present facilities, the matter can be handled as it ought, and a proper investigation and report made of each case. Of course, it would be possible to grant to every drug store in the state a certificate in a formal way, but even this would consume a vast amount of time, as can be ascertained by any one who cares to investigate the subject.

DRUG STORE STATISTICS.

To begin with there are 332 towns and 80 cities in this state and in 1892, statistics placed the number of drug stores at 1486, but the number has increased marvellously in the intervening time until now it is said there are 2,500, but this is probably somewhat exaggerated. Thus it will be seen that the clerical work alone in connection with these certificates will be considerable, not to mention the time which will be spent in investigation of applicants. There is every reason to believe that the present arrangements of the board are not ample to cope with this subject successfully. There must soon be a change of some kind. Two suggestions have been made. One is to employ another agent or agents, but here is an important difficulty, that of finding the right kind of person or persons for the work in hand. The most feasible plan proposed is to have the chairman, and possibly the secretary too, spend more time in the office of the board. Chairman Whitney is at the office two days of every week now, but when the change is made it is thought that he will spend at least five days of the week here. Indeed it has been suggested that a bill be introduced into the next session of the Legislature to secure a fixed salary for the president and secretary of the board, these officers to devote their entire time to the State, traveling and doing office work by turn. The work of the board increases at every point and the importance and responsibility of the commission grows accordingly. During the last year, for instance, 544 candidates were examined for certificates, while up to July 1 of this year, when only three-quarters of the board's fiscal year had expired, 669 candidates had been examined, so that on all sides the business of the board is on the increase.

ILLEGAL USE OF CERTIFICATES.

Another feature of the board's work which is assuming large proportions is that of investigating misused or bogus certificates. The board had an interesting case a few days ago of a man who had so attempted to alter an old certificate of registration in pharmacy as to make his name appear in place of that of a dead man. It is almost needless to say that the offender had been refused the desired certificates by the board, on the ground of incompetency and unreliability. He had found the document among the dead man's effects, and bought it of his widow.

DAILY PAPERS ON THE COMMISSIONERS.

One of our daily papers is devoting considerable space to the affairs of the board, and some of the statements which are made will hardly bear the light of day. For instance, this sheet will have it that the Police Commissioners of this city and

the Board of Pharmacy are expected to act in conjunction in the matter of granting licenses to the Hub's druggists next May, and that even now the patrolmen are on the lookout for apparent abuses of the privilege granted with a view of keeping an exact record for future use. Now, the truth of the matter is that no steps have been taken towards uniting the forces of these boards, and this is on the authority of a member of one of them. What time will bring about no one can tell, but the statement made at this time is ill-advised. As far as the patrolmen are concerned they are doing what they have always done, nothing more. It wouldn't be a bad idea though, if some of them wiped their befogged spectacles, for there are "druggists" in this city who have not sufficient respect for the liquor laws. This same paper in speaking of an agent for the board says "it is almost impossible to find a thoroughly competent man for \$1,500 a year who cannot be bribed." Who decided this point? Not the members of the board. Again in speaking of the increase in the number of candidates examined this year the following is found: "Of course, this growth is uncalled for, and the members of the board have no hesitation in saying that in some cities forty per cent. of the 'drug stores' are simply rum shops with a mortar and pestle sign. One by one they are to be crushed." We think that no member would care to father the above, though some of it is true. The proportion seems too high, and if it were authoritative it would be interesting to learn where the data was obtained. Suspensions ought not to count.

THE BOARD IN NEW QUARTERS.

The board has left its rather dingy apartments at No. 18 Beacon street, and is now snugly ensconced in new chambers at the State House extension.

The new rooms are situated on the basement floors. The finishings and furniture are entirely of oak.

President Whitney is delighted with his quarters. The suite consists of two rooms and an ante-chamber. Fifteen oak tables are placed about the room. The monitor is also provided with a desk.

Leading from this is the second room, well appointed with desks for the president and secretary, and great round table at which the examining board will preside. The ante-room is fitted up as a laboratory, where the student will do all the practical work required by the board. The toilet room adjoins the laboratory. Under the present arrangement the student will always be within bounds.

THE AMERICAN PHARMACY FAIR.

Plans for the American Pharmacy Fair, which is to be held in Mechanics' Hall, in this city, in May next, have been completed, and the indications are that the display, the first of its kind ever attempted in the United States, will be a very notable one.

The exhibition will embrace everything connected with drugs which is calculated to interest or educate the public and the members of the pharmaceutical profession, such as the various articles used as medicines, curious chemical specimens, ingenious apparatus, etc. The fine exhibit of Harvard at the World's Fair will be included in the list. The leading manufacturing chemists of the country have promised to participate. Special days will be devoted to nurses, physicians and associations of various kinds.

Already some of the leading national and State professional associations have

been taking formal steps to promote the success of the fair, and among others who have indorsed it are President E. L. Patch of the American Pharmaceutical Association, President Henry Canning of the Interstate Retail Druggists' League, President J. Allen Rice of the Massachusetts State Pharmaceutical Association, Chairman Whitney of the State Board of Registration in Pharmacy, President W. F. Sawyer of the Massachusetts College of Pharmacy, President Cobb of the New England Retail Druggists' Union, President Stiles of the Apothecaries' Guild of Boston and vicinity, and numerous other leaders in pharmaceutical work in this and other States.

DELEGATES TO THE A. P. A.

Last Friday evening a large number of New Englanders left for the A. P. A. convention. Among those in the party were:

A. K. Tilden, George C. Williams, J. J. Estes and Mrs. Estes, F. H. Butler, secretary of the State board of registration of pharmacy and Mrs. Butler; John Godding and Mrs. Godding, E. A. Robinson, William F. Sawyer, president of Massachusetts College of Pharmacy, and Mrs. Sawyer; Prof. E. L. Patch, president of American Pharmaceutical Association; T. B. Nichols, Harry R. Mason, George M. Hoyt, H. M. Whitney, president of the State board of registration of pharmacy, and Mrs. Whitney; S. A. D. Sheppard and Mrs. Sheppard, Mrs. M. E. Sawyer, Mr. and Mrs. L. D. Drury, Miss Bessie Johnson, D. A. O'Gorman, editor of the *New England Druggist*; E. E. Dickenson, James T. Eagney, H. J. Sperry and Mrs. Sperry, J. E. Morrison, G. Ramsberger, O. E. Miner, M. D.; Prof. Joseph P. Remington and Mrs. Remington, Mr. and Mrs. McIntyre, H. R. Chears, Prof. Caspari, Dr. Alfred Dohme, Charles E. Dohme, and Mrs. Dohme, and F. W. Patten.

AN OPIUM FIEND.

Fred. Olert was arrested at Lowell some weeks ago for obtaining opium and cocaine by means of forged orders; he was subsequently convicted and given a month's board at the county hotel. The day after his release he was at his old tricks, but this time he selected a fresh field. Walden, Melrose and Stoneham druggists felt his presence, but when he came to Sargent's in Walden, he met his Waterloo. Mr. Sargent had been previously warned, and when the fellow presented an order for cocaine, purporting to be signed by a Cambridge physician, he was detained by a pretext, while the police were telephoned, and his arrest quickly followed. He has been held in \$1,000 bonds for his appearance before the Grand Jury. He claims that he contracted the cocaine and opium habit about nine months ago and he cannot give it up, although he has spent all his money trying to get cured. When arrested at Lowell, Olert said that he was a nurse, but when he suffered a like indignity at Walden he is "a chemist by profession."

MINOR NOTES.

C. W. Browne of Ipswich will soon move into a new store.

E. T. Brown is to open a new store in the near future at Ipswich.

Haley P. Thompson of Lisbon, Me., was in town for a few days recently.

George E. Burnham, Melrose, has debts amounting to \$4,000 and no assets.

James W. Tufts is on a western trip which is a combination of business and pleasure.

H. E. Guzm's store at Uxbridge was burglarized a short time ago; \$40 in goods and money was taken.

Edwin W. Shedd, Ph.G., of the T. Metcalf Co. is enjoying his vacation with his family at Wilton, N. H.

A. Gilman Ferdinand's store, 996 Washington street, is now "a postal agency" in addition to the other attractions.

Bullock & Waldron, New Bedford, have just placed a new fountain from Tufts' establishment in their store.

Geo. F. Foedick, head salesman for James W. Tufts, is imbibing strength among the alluring breezes of Cottage City.

The latest advices from the state house place the renomination of Pharmacy Commissioner Whitney as an absolute certainty.

William B. Berry, the Maine and New Hampshire representative for James W. Tufts, is meeting with much success upon his present trip.

Alvan George, Jr., has opened his new store at the corner of Washington and Dale streets, and the unanimous verdict is that it is a handsome establishment.

Metcalfe Adams and John T. Cullock of 892 Tremont street, were arrested recently upon the charge of keeping and exposing for sale intoxicating liquors without a license.

The Malden police raided the South End drug store owned by Daniel J. Driscoll recently, and secured between two and three gallons of various kinds of liquors.

Newburyport's license commission has granted licenses of the sixth class to Charles L. Davis, Joseph Williams, Healey & George, Paul Adams, Eben Bradley and George Osgood.

The M. S. P. A. was represented at the meeting of the A. P. A. by a committee composed of Henry M. Whitney, F. H. Butler, Amos K. Tilden, George B. Nichols and George G. Williams.

The firm of Henry M. Whitney & Co., Lawrence, is dissolved, and the senior partner will attend to the business alone as formerly, while Mr. Ketchum is to represent Keasby & Matison upon the road.

A fire broke out in Theo. F. Rice's store, 1005 Washington street, recently, and before it was extinguished the damage amounted to \$1,000. Pending the adjustment of the insurance the store has been closed, but the repairs are now being rapidly pushed forward and the store will again be open in a few days.

"The cat came back" in the song, but the example of this feline has not been emulated by the coon cat at the City Hall drug store, which has been missing since July 5. There are many anxious inquiries by customers for "that cat," but the clerks can give no information, though they have their suspicions, but that's all.

William L. Smith of Fall River, died of appendicitis on Sept. 1. Dr. Bull of New York performed an operation, assisted by a half dozen local surgeons, but the inflammation had gone too far to save the sufferer. Deceased was well-known in this city, where he had numberless friends; he was a prominent Elk and Red Man, and he was a Pythian and Mason in high standing. He was also a member of the call force of the fire department.

Last July the state board of health examined 86 samples of drugs; 23 of that number were found to be of good quality. The samples of drugs found to be adulterated were ammonia water, distilled water, ether, powdered opium, tincture of iodine and red wine. The laboratory of this board will be moved to new quarters in the state house annex, as soon as the rooms under completion are finished. It is understood that the laboratory will be fitted in a most elaborate manner for the work which the chemists have to do.

PENNSYLVANIA.

PHILADELPHIA, September 10.—The passing of the tariff bill, as predicted in the last issue of the AMERICAN DRUGGIST, has come to pass, and owing to this, mainly, the drug business in this city has had somewhat of a revival. The activity displayed is due to two things. First that the retail druggists were only buying in such quantities as would meet their daily wants, and second, that as there were many changes to be made in the tariff it was thought advisable to hold aloof until there was some agreement reached, which allowed the druggist to find how he stood. It is a well-known fact that for the last ten months the wholesale drug houses were compelled to keep the same force employed owing to the retailers buying only in small lots, but now there seems to be a change. The druggist knows where he is, and has begun to fill up his depleted stock, and from now on until he is satisfied that he has enough, business is likely to show some improvement.

THE NEW TARIFF BILL.

During the last week almost all the excitement in the drug trade has been caused by the new tariff. The passing of the bill has created a demand for goods in bond, on which a higher duty was charged under the McKinley Bill. There has been a good demand for alcohol, notwithstanding the price has rapidly advanced.

THE FREE ALCOHOL SECTION.

The druggists are perplexed over the clause pertaining to the exemption of duty on alcohol used in medicine and the arts, and it is feared that considerable trouble may arise before an understanding can be reached. Some few years ago this same subject was brought up before the Phila. Drug Exchange by the then Secretary of the Treasury. The matter at that time was carefully gone into, and after a thorough investigation, it was thought that it was not feasible to go to the trouble which the government required to carry out any laws on this subject. Notwithstanding this action the exchange has taken the matter up again, and some kind of an understanding in reference to the section of the tariff bill pertaining to free alcohol is being sought after. On September 4, M. N. Kline, of the firm of Smith, Kline & French Co., went to Washington to consult with Secretary Carlisle on this subject.

KEEP POSTED ON LOCAL CHANGES!

The druggist who has his store away from the central section of the city is generally considered a big man by his neighbors and it pays him to be posted on all live subjects. A few days ago a pretty young miss entered the store of a well known druggist in the vicinity of Fifteenth street and Columbia avenue, and asked the clerk in charge if he could direct her to the base-ball park. This place is situated at Fifteenth and Huntingdon streets, but it happened that only a few days previous fire made sad havoc with the grand stand and the grounds, and the games had to be played elsewhere. The druggist knew there had been a fire at the grounds, but here his knowledge stopped, and he directed the young lady to Fifteenth and Huntingdon streets. On her arrival she was very much vexed at finding the grounds in ruins. She was a good customer of the druggist, but now she does her "trading" elsewhere, as she contends that a druggist who does not keep posted on the events of the day, does

not improve much in his knowledge of his own business.

CLERKS SCARCE IN PHILADELPHIA.

During the Summer months many of the retail druggists have considerable trouble in securing competent clerks, and it is a frequent occurrence to see in the daily papers advertisements for drug clerks. This summer seemed to have been worse than any other year. Nearly all the drug stores have an assistant clerk who is a student at the Philadelphia College of Pharmacy, and it is to the student's interest to secure a place of this kind, as it not only gives him an opportunity to attend the college but gives him a practical knowledge of the business which is worth considerably more than the mere theory. Of late years it appears that the clerks as soon as they receive their diplomas depart for more prosperous fields, and as Philadelphia is pretty well supplied with drug clerks it does not take much of an inducement to get the young druggist to leave. Besides this the students at the college are coming from various sections of the world, and when they first enter the employ of a druggist here they do so with the intention of leaving as soon as they secure the proper credentials.

SUNDAY CLOSING.

There is some talk of closing up the drug stores on Sunday, but it is believed that it will not amount to much. Some time ago George B. Evans started the movement by announcing that all his stores would be closed on Sunday. Others were more conservative, and refused to sell only drugs, while some closed their stores during certain hours. It is, however, nothing but fair to the druggist and his assistants that Sunday should be a day of rest for them as well as for any one else. They are in need of it, as the hours of a druggist is legion. He generally has a night bell, and there is hardly one of them who cannot tell how they have been called out of their warm beds in the middle of winter to put up five cents' worth of paregoric, or a similar amount of tooth-ache drops. Even if the store could not be closed during all the day, certain hours should be set apart, during which no business would be transacted.

PHILADELPHIA COLLEGE NEWS.

J. C. Peacock and C. C. Manger, who recently associated themselves as partners in the business of manufacturing pharmaceutical specialties, have discontinued the firm. Mr. Peacock will again be in the chemical laboratory at the College of Pharmacy as Professor Trimble's assistant, when the fall term opens. Mr. Manger will go in the drug business in Galveston, his former home.

H. H. Wollé has resigned as business manager of the *American Journal of Pharmacy*. He is widely known in drug circles, and has had a long and honorable career, having looked after that publication's business interests since 1871. A manager will probably not be appointed to succeed him, but that part of the work will be supervised by the Committee on Publication. Under Professor Trimble as editor the journal is more welcome than ever to pharmacists and scientists, and its usefulness has increased in the same proportion.

The Board of Trustees of the College of Pharmacy have awarded the contract for the electric dynamo and appliances, which will be of much service in the buildings. The needed amount for the expense, about \$2,000, has almost been received by the Alumni Association's energetic committee

The advent of September always brings the vanguard of students to the steps of the College of Pharmacy. Some linger on the steps in a bewildered sort of way, instead of doing a little preliminary brushing up on the text-books. The few weeks before the term opens are filled with opportunities for laying in a solid foundation of knowledge. It also helps wear off that nervous feeling which clings to some of the students from start to finish. Then, too, the professors are not as fond of raw materials as some strangers are led to suppose. So the advice of an alumnus is: "Keep away from the college steps."

Professor Joseph P. Remington, Professor Ryan and Mahlon N. Kline, of the Smith, Kline & French Company, were among the Philadelphians who went to Asheville to attend the sessions of the American Pharmaceutical Association. Professor Trimble was kept at home at the last minute on account of pressure of work on the forthcoming book which Professor Sadtler and himself have been preparing. It will treat on inorganic, organic and analytical chemistry.

Professor Frank X. Moerk, Professor Sadtler's assistant, has contributed to chemical literature an exhaustive article on "The Opium Assay Method of the New Pharmacoposia." It is replete with suggestions for the aid of pharmacists. Professor Moerk writes in much the same way as he lectures—in clear and practical manner.

The latest novelty in the way of window advertising is drawing attention from crowds which gather in front of George B. Evans' Chestnut street pharmacy. Dancing beans are what amuse and puzzle the people. The beans are larger than those of coffee and keep twisting and turning in a truly mysterious manner. The curious want to know all about it, and the clerks in the store are kept busy explaining what makes the beans so full of animation.

MINOR NOTES.

W. H. Lacey, the well known druggist at 18th and Green streets, has received permission from the Bureau of Building Inspectors to make a number of interior alterations to his store and basement.

Bullock & Crenshaw, one of the oldest drug houses in the country, has taken on a new lease of life and is now in the arena ready to meet all competitors. Recently this firm fitted out the Shock pharmacy at 3068 Kensington avenue.

William B. Burk, the senior member of the well known importing sponge house, has just returned from a trip to Gettysburg and the Luray Cave. Mr. Burk was accompanied by his wife. They had a pleasant trip and were benefited by it.

The manufacturers of Quentin's perfumes, on Arch street above 5th, made quite a hit when they named one of the extracts after Willard Spencer's pretty opera, "Princess Bonnie." Notwithstanding this perfume was placed on the market late in the season, it like the opera scored a big success, and those who had once used it encored it again and again. It is the intention of this enterprising firm to put this perfume in all the leading cities of

the United States, but it will only be introduced when the opera makes its first appearance in each town. Besides this a number of other extracts equally as fine, are being sought after.

Howard Barclay French.

A SKETCH OF HIS LIFE.

Howard B. French was born in Salem, Columbiana County, O., Sept. 3, 1848. He is the son of Samuel H. French, sixth in descent from Thomas French, a member of the Society of Friends, who came to America from England about 1677 on account of religious persecutions, and settled in West New Jersey as one of the proprietors. In 1838 he removed with his parents to Philadelphia, where he attended the Friends' select school at Fourth and Green streets, and when thirteen



HOWARD BARCLAY FRENCH.

years of age was transferred to the Friends' central school at Fifteenth and Race streets. He remained at the latter until 1866, when on account of ill health, he was compelled to relinquish his studies, and after recovering from a severe illness decided to study pharmacy, entering as an apprentice with William B. Webb at the southwest corner of Tenth and Spring Garden streets, where he remained until he was graduated from the Philadelphia College of Pharmacy in 1870.

In July, 1870, he went to the store of his father's firm, French, Richards & Co., wholesale drug and paint manufacturers, at the northwest corner of Tenth and Markets streets, where he remained for one year, at the expiration of which time he was transferred to their paint manufactory at York Avenue and Callowhill street. On Jan. 1, 1883, the paint and drug branches of the business were separated, he uniting with his father, his

brother, William A. French (since deceased), and John L. Longstreth under the firm name of Samuel H. French & Co., continuing the manufacture of paints and builders' supplies, as successors to French, Richards & Co., in which business he is still actively engaged.

In 1871 he became a member of the Philadelphia College of Pharmacy, and soon after was elected one of the trustees, which position he has filled almost continuously from that date until the present time. He has always taken an active interest in the welfare of the College, and has been ambitious to keep it at the head of the pharmaceutical institutions in the world. It was largely through his instrumentality that the extensive additions and improvements were made to the College buildings in 1892, he serving as chairman of the building committee, and in that capacity personally superintending their construction. He is chairman of the property committee and committee on discipline, and has served on many of the most important committees appointed by the board of trustees. Recently, he in connection with the Smith, Kline & French Drug Company presented to the college the Martindale Herbarium, consisting of over 200,000 specimens from all parts of the world. Of national reputation, this herbarium embraces numerous collections made by the most eminent botanists and is one of the finest in the United States.

Mr. French is chairman of the committee on the improvement of the mercantile and manufacturing interests of Philadelphia, and a member of the committee on municipal affairs of the trade's league. He is secretary and an active member of the Union Committee on transportation, manufacturing and commercial interests of Philadelphia; a member of the Manufacturers' Club, and one of its committee on commerce and transportation; chairman of the executive committee of paint manufacturers of Philadelphia; and a director in the National Paint, Oil and Varnish Association. He is also trustee of the Southern Home for destitute children; manager of the Home Missionary Society; a member of the Historical Society, Philadelphia Bourse, and numerous other organizations and is a director in the Equitable Trust Company.

In the selection of a site by the Secretary of the Treasury for the location of a new mint in Philadelphia, Mr. French took very active interest, and was made chairman of a special committee appointed by the Trade's league, who asked the co-operation of all commercial bodies in Philadelphia of which joint committee he was also chairman. It is due to James T. White & Co. of this city to state that the major portion of the foregoing sketch is taken from the "National Cyclopaedia of American Biography," a work now in course of publication and which contains a very full account of the Philadelphia College of Pharmacy and of the individuals who have contributed to make that school of pharmacy the influential institution it has become. The illustration is from a photograph by Gutekunst of Philadelphia.

MICHIGAN.

DETROIT, Sept. 7.—Stanley E. Parkill, secretary of the State Board of Pharmacy, has published his annual report, which was submitted to Governor Rich. It contains a list of all the registered pharmacists and assistants whose certificates are now in force. He says that during the year the board has examined 826 applicants for registration as registered pharmacists and 85 for assistants. Of these 98 were given first class certificates and 96 as assistants. The names of 23 registered pharmacists were dropped from the register because of failure to renew the annual registration. The registration in force at the close of the year was 3,120 registered pharmacists and 328 assistants.

A NEW RULE ADOPTED BY THE MICHIGAN BOARD.

The report goes on to say: "The large per cent of applicants for registration who were entirely without practical knowledge of the duties of a pharmacist, whose information was derived from quiz compends, and in schools established to coach its students for examination, without regard for practical work, rendered necessary in the opinion of the board, for the protection of the public, the adoption of a rule requiring practical experience under a competent pharmacist before granting a certificate of registration. This rule we believe will have a good effect in making the licentiates of this board more efficient pharmacists. We are pleased to note that the regulation meets with the hearty endorsement of the druggists of Michigan."

CONDITION OF THE TREASURY.

During the year the board received 69 complaints of violation of the pharmacy law. Of these, the great majority were dropped after investigation. Five persons only were convicted, and fines were collected amounting to \$95. The board has the satisfaction of reporting that while the observance of the law especially in the smaller towns is not as perfect as it might be, yet conditions are as satisfactory as could be expected from any regulation of such a nature. The board had cash on hand July 8, 1898, to the amount of \$3,786.80. There was collected for renewals \$8,177.50. From applications for examination, \$758; total, \$8,721.12; leaving a balance of \$3,049.68 in the hands of the treasurer.

A narrow escape from a conflagration took place recently in the warehouses of Williams, Davis, Brooks & Company. A carboy of nitric acid broke in the passage way where teams load and unload. The acid began to scorch the woodwork and as several more just like it were standing near by, some lively hustling was done with fire extinguishers and whiting to put it beyond the power of starting a fire. The hoofs of several horses were burned severely by the acid.

The Brown Pharmacy Company recently started a cut-rate drug store at 180 Woodward avenue. The very finest of fixtures were put in and the firm announced that they were the leading cut-rate druggists of Detroit and that they intended to cut the life out of everything. That was some two months ago. On August 20, during the night, all the stock and fine fixtures were packed up and the next morning where once had been located the finest cut-rate drug store in Detroit, a vast solitude reigned. The same firm has a firmly established store at 110 Woodward avenue, which is a cut-rate drug store. It is on a more modest plan

and is well located. When Mr. Brown announced that he would start a cut-rate establishment a few months ago, all the druggists of this city held a meeting and it was decided to wage general cut-rate war. The removal of the stock of this establishment to parts unknown is looked upon as a sort of victory by the trade in Detroit.

DETROIT ITEMS.

Henry Haigh, son of the prominent druggist here, has left for a trip to Italy with his sister.

G. R. Henderson, a chemist, who lives at 109 Joy street, was waylaid recently by highway robbers and relieved of \$20 in cash.

John B. Morris & Company have purchased the drug store of Donald Robertson, 868 Fort street. The consideration was \$700.

T. E. Clough, formerly with T. H. Hinchman & Company, has accepted a position with W. H. Burk & Company, corner of Elizabeth street and Woodward avenue.

Evan C. Fewster, a young chemist working in the laboratory of Frederick Stearns & Company, became insane recently and was sent to the Pontiac Asylum. He was a bright young man and had brilliant prospects before him.

Caroline C. Rolls traded her drug store at 400 Michigan avenue, to Charles R. Brown and William Church for a St. Clair County farm. She avers that they represented the land to be free from incumbrance, but it was mortgaged, and the same was recently foreclosed. She now brings suit for \$5,000 damages.

A pharmacist recently advertised in one of the morning papers for a registered clerk who spoke and wrote English, German, Polish, Russian, Italian and Spanish. This dealer lived in one of the interior towns. It would seem that the qualifications of a drug clerk were becoming more complicated and difficult to attain. He must be a fluent linguist as well as a good chemist.

STATE NEWS.

L. E. Benson & Company, of Woodland have dissolved partnership.

J. J. Dexter & Company, druggists of Belvue, have moved into new quarters in the Evans Block.

Big Rapids: Dr. J. E. Pease is preparing to build an addition to his drug store on North State street.

N. Jefferson, of Rockford, formerly with Neal McMillan & Hessler, is now located at Battle Creek.

Harris & Thompson, the well-known Flint druggists, have a live frog in their show windows with five perfectly developed legs.

Red Jacket: The drug store of Fichtel & Rupprecht is undergoing repairs, and with a new stock will be one of the finest in the city.

Red Jacket: E. Kiovpalo has sold his interest in the drug store here to his partner, Werner Nikander, who will conduct the business.

Clinton: H. M. Heal has packed his drug stock here and has moved to Detroit, where he will take charge of the manufacturing department of T. H. Hinchman & Company.

Essexville: O. A. Loyd, the druggist, has a neat way of advertising. Until January 1, 1895, he will accept all United States pennies bearing the date 1877, as ten cents in trade at his store.

Lansing: Charles Damon has purchased the interests of Mr. Davidson in the firm of Gessenmier & Davidson, show case manufacturers. The business will be conducted by Messrs. Gessenmier and Damon.

Grand Rapids: William Sanford, the druggist at the corner of West Fulton and Jefferson streets, has presented the John Ball Park authorities with about 700 black bass, speckled bass, bullheads, and pickerel.

Saginaw: The south end postoffice has for a long time been located in the drug store of Moeller & DeLands. It will now be moved in order to give the firm more room. The store will be remodeled and repainted.

Grand Rapids: The H. E. Girard-Grand Company and John A. Gibb & Company, last week filed a chattel mortgage to the Hazelton Perkins Drug Company to secure the payment of a promissory note for \$916.84.

Lansing: Messrs. Charles C. Alsdorf & Son have placed a new zinc-lined oak cigar case in their store, which is as neat and tasty an article of store furniture as can be found. It was manufactured by the Lansing Lumber Company.

Pontiac: As nice a pair of show cases as has ever been seen in this city were placed in the drug store of Perry Weed recently for his cigar trade. They are double deckers, the lower part being reserved for the storing of surplus stock.

Flushing: Alfred Perry, who keeps a drug store here, recently attempted to draw some alcohol with a siphon. The fluid took fire from the lighted lamp he carried, badly burning him about the face. The building was saved with difficulty.

Albion: Gleason & Knapp have sold the north side drug store to Walter Reynolds, formerly of Reynolds & Gary. Mr. Knapp will leave this city and take up his residence at some point in New York state. He leaves a host of friends in this section of the country.

Ontonagon: H. N. Meloche, of the drug firm of Meloche Brothers, Belding, will shortly open a store here. L. B. F. Meloche, a physician, will be associated with him. The new concern will be located in James Corgan's store and expect to be ready for business about September 20.

Marquette: Dr. Desjardins, physician and druggist, died here in the latter part of August. He was one of the best known citizens and men in the Upper Peninsula. Dr. Desjardins was in partnership in the drug business with his son, F. H. Desjardins, and their store was one of the handsomest in the city. The cause of his death was Bright's disease. He leaves a wife and six children.

Marion: A new drug store has been opened in the Clark Block by the A. J. McHenry Company, of which George B. Howe is chemist. There is plenty of capital behind the concern, which will continue to manufacture the Howe preparations which have become well known all over the country. Mr. Howe is well known in this village, having once been its president. The concern was formerly located at Temple, Mich.

Muskegon: Orren S. Hopperstead has purchased the interest of Jacob Jesson, in the Jacob Jesson Company, druggists. He has become treasurer, secretary and director. Charles S. Coon, who has been in the employ of Fred Brundage, also pur-

chased a block of stock and is now vice-president. The young men are thoroughly familiar with the business and cannot fail to build up a good trade. The many friends of Mr. Jesson will be sorry to learn that ill health was the cause of his selling out. He will leave the city.

Muskegon: State Senator C. L. Brundage was arrested last week and has been held for investigation by the grand jury in \$300 bonds. He is charged with not having paid the government tax for selling liquors in his drug store here during July. Mr. Brundage says that the sale of his store to J. D. Sheridan was practically consummated the latter part of June, and from then on he regarded himself as his assistant. He says that the new proprietor took out a special permit early in July, and on the 25th made application for the regular permit.

Manistee: George R. Scoville, one of the best known druggists of this city, died last week of peritonitis. Mr. Scoville was taken ill while removing his drug stock into new quarters in the Salling Block. He never recovered from the effects of his sickness. He was 42 years of age, and was born in New York. While quite young he came to Flint, Mich., and began to learn the drug business. He learned it thoroughly, and was married. He came to this city in 1881, and embarked in business under the firm name of Scoville & Rich. For ten years this partnership continued, when the business was sold to Fagan & McElroy. Mr. Scoville moved back to Flint and again started in the drug business. After remaining there six months, he returned to Manistee, and purchased the drug and grocery stock of Secor Brothers. The deceased was a member of the F. & A. M., K. O. T. M. and A. O. U. W. He leaves a loving wife and two children in comfortable circumstances.

SOUTHERN NOTES.

The firm of W. P. Beauchamp, at Bowling Green Ky., has changed to Beauchamp & Parker.

The firm of Gordon & Burge is dissolved by mutual consent. J. O. Burge succeeding to the proprietorship of both places, corner Union and Cherry and corner Fifth and Woodland, Nashville, Tenn.

The next meeting of the Tennessee Board of Pharmacy for examination will be held at Knoxville on Oct. 9, next. Application blanks or any information on the subject can be had from the secretary, J. O. Burge, Nashville.

Owing to the large increase of their retail trade W. A. Strother & Co., of Lynchburgh, Va., have found it necessary to increase their force in that department. With this end in view they secured the services of J. H. Pendleton, a prescriptionist of long experience and one who is favorably known to a large circle of Lynchburgh friends.

A local association of pharmacists and chemists has been formed at Nashville under the name "The Nashville Chemical Society." The following are the officers for the ensuing year: President, R. E. Page, vice-president, E. B. Davis, secretary and treasurer R. H. Gordon. The association is organized on the same lines as the Louisville Botanical Club. The society meets the second and fourth Monday in each month.

MISSOURI.

St. Louis, Sept. 5—The St. Louis Sanitary Works, or "Boas Butler's Stink Factory," as the citizens of South St. Louis call our works for the reduction of garbage, is having a hard fight for its life. The works are located in the southern part of the city, surrounded by hospitals, schools, churches, convents, and the homes of many people who have worked and saved for years to get a place they could call their own. Over a year ago, when the location for the works was decided upon, the citizens of that part of the city got together, drew up resolutions and appointed a delegation to appear before the City Council, Board of Health, etc., and enter a protest against having the works erected in their midst on account of the disagreeable odors it would emit. They were sent home with the assurance that the works could not and would not stink, and were censured for making a fuss before they had any real cause to do so. The works have now been in operation several months and from the very first day—according to the testimony of hundreds of people living near by—there has been a peculiar sickening stench both night and day. It was certainly not all imaginary, for people sold their homes and moved away, property declined in value, and business was seriously injured. Finding the situation steadily growing worse, the citizens resolved to stand it no longer. After holding several very enthusiastic as well as deliberate meetings they raised a large sum of money, employed two of our best attorneys, elected that never tiring, ever progressing pharmacist, Prof. Francis Hemm, leader, and are now having one of the hottest trials ever held before a city board of health. The city Sanitary Officers are trying to show cause why their works should not be condemned as a nuisance. They are taking the stand that their works are not a nuisance and introducing expert testimony to show that the factory could not stink; they try to throw the nuisance on a sewer in the neighborhood. The whole city is in sympathy with the South St. Louis citizens, the daily papers are loud in the espousal of their cause and everything seems to be going against the Sanitary Works. The trial will probably last another week. It is the general opinion that should the case be decided against the citizens, the works would be blown up or burned down within thirty days, but the Sanitary Officers are on guard, as the testimony of Saturday, September 1, brought out the fact that a \$175,000 insurance had just been placed on the works. Everyone seems to feel that it is a case of the citizens against a political boss, and for the last two weeks it has been one of the principal topics of discussion all over the city.

THE ST. LOUIS UNION RAILWAY STATION.

The St. Louis Railway Station was dedicated on Saturday evening, Sept. 1st, in a manner which will not soon be forgotten by those who were fortunate enough to get tickets of admission. Great care had been exercised in giving out tickets and no one was admitted without one, and yet fully fifty thousand people passed through the entrances. The whole structure was illuminated in St. Louis style and a band of over one hundred musicians helped entertain the crowd. There was a banquet given to the state, city and prominent railroad officials and a few of our most distinguished citizens. St. Louis now boasts of having the largest and finest railroad station in the world.

CITY DRUG TRADE.

The retail city drug business seemed to reach low water mark last week. Many of the druggists claimed it was the slowest week of the year. The druggists in the fashionable part of the city are especially complaining, as so many of their customers are out of the city on their summer vacations, and this is the time of year that many of our physicians get out for a little recreation.

MISSOURI STATE PHARMACEUTICAL ASSOCIATION.

President Brandenberger announces the following committees for 1894-5.

Membership—A. S. Forker, Kansas City; Chas. A. Lips, St. Louis; F. E. Meadows, Rockport; L. A. Howard, Brookfield.

Papers and Queries—G. H. Chas. Klie, St. Louis; A. R. Edmonds, Miami; J. M. Love, Kansas City; A. H. Koch, St. Louis; J. C. Falk, St. Louis.

Legislation—H. F. A. Spilker, St. Louis; N. De Wyl, Jefferson City; J. P. Boaz, Springfield; W. E. King, Kansas City; C. C. Davidson, Eldorado Springs.

Drug Adulteration—Francis Hemm, St. Louis; Chas. O. Curtman, St. Louis; J. M. Good, St. Louis; H. M. Whelpley, St. Louis; Ambrose Mueller, Kirkwood; Charles G. Hauser, Mine La Motte; Wm. Mittelbach, Boonville; C. C. Hamilton, Kansas City; J. C. Falk, St. Louis; J. H. Ewing, Richmond; J. A. Robertson, Slater; A. M. Doerschuk, Kansas City; C. C. Giesick, Kansas City; P. E. Ott, Sedalia; F. E. Williams, Joplin; C. C. Corcoran, Kansas City; J. M. Love, Kansas City; H. M. Pettitt, Carrollton; A. R. Edmonds, Miami; G. H. Chas. Klie, St. Louis; T. A. Buckland, St. Louis.

Trade Interests—Hon. C. P. Walbridge, St. Louis; G. J. Meyer, St. Louis; F. Faxon, Kansas City; H. Williams, Kansas City; E. W. Gallenkamp, Washington.

Entertainment Committee—F. W. Sihler, Kansas City; W. P. Huckle, Kansas City; W. D. Hussung, St. Louis; G. P. Hardesty, Kansas City; A. S. Forker, Kansas City; O. B. Dickinson, Kansas City; C. W. Fassett, St. Joseph; E. G. Orear, Breckenridge; J. D. Swan, Kirkwood; W. M. Federmann, Kansas City; W. E. King, Kansas City; A. Breunert, Kansas City; W. C. Johnston, St. Louis; G. E. Hopkins, St. Louis; W. S. Lindale, St. Louis; F. R. Scharlach, Jefferson City; J. A. Robertson, Slater; J. H. O'Reilly, Kansas City; E. M. Schorers, St. Joseph; G. E. Whitcomb, Jefferson City; J. M. Overstreet, Springfield; J. C. Simmons, Liberty; W. S. Mellen, St. Louis; Geo. Eysell, Kansas City; H. C. Tyler, St. Louis; W. C. Off, St. Louis.

Microscopy—H. M. Whelpley, St. Louis; Ambrose Mueller, Kirkwood; C. C. Hamilton, Kansas City; C. G. Hauser, Mine La Motte; Mr. L. Brecklein, Concordia.

Pharmacopoeia—C. O. Curtman, St. Louis; C. C. Hamilton, Kansas City; J. C. Falk, St. Louis; E. W. Patton, Richmond; J. M. Good, St. Louis.

National Formulary—Wm. Mittelbach, Boonville; R. E. Maupin, Pattonsburg; W. C. Waldeck, St. Louis; H. C. Groves, Glasgow; C. F. Geiger, St. Louis.

Attendance—W. P. Huckle, Kansas City; F. R. Scharlach, Jefferson City; G. P. Hopkins, St. Louis; J. D. Swan, Jr., Kirkwood; R. W. Campbell, Memphis.

Transportation—Otto Claus, St. Louis; Eugene Soper, St. Joseph; J. L. Sambart, Kansas City; W. E. Bard, Sedalia; W. D. Hussung, St. Louis.

Exhibits—J. F. Curry, Moberly; P. L. Hess, Kansas City; H. De Wyl, Jefferson City; C. L. Cravens, Excelsior Springs; G. W. Clinton, Independence.

Deceased Members—F. L. James, St. Louis; P. H. Franklyn, Marshall; C. E. Corcoran, Kansas City; J. H. Barnes, Liberty; Gustave Koch, St. Louis.

Constitution and By-Laws—Wm. Mittelbach, Boonville; H. M. Whelpley, St. Louis; Francis Hemm, St. Louis.

Delegates for American Pharmaceutical Association—H. M. Whelpley, St. Louis; Wm. Mittelbach, Boonville; J. M. Good, St. Louis; H. M. Pettitt, Carrollton; George Eysell, Kansas City.

Alternates—Prof. Francis Hemm, St. Louis; W. W. Alexander, St. Louis; A. T. Fleischmann, Sedalia; J. A. Gallagher, Kansas City; S. R. Farrar, Lebanon.

Illinois State Pharmaceutical Association—H. F. Hassebrook, St. Louis; H. M. Whelpley, St. Louis; H. R. Strong, St. Louis.

Alternates—G. R. Merrell, St. Louis; O. F. Heitmeyer, St. Louis; W. D. Movata, Carthage.

Iowa State Association—G. J. Meyer, St. Louis; S. W. Morton, Springfield; F. L. Striblin, St. Joseph; D. K. Morton, Missouri City.

Alternates—W. R. Rhodes, Slater; O. W. Smith, Sedalia; C. A. Hutchins, Higginsville; W. Federman, Walker.

Kansas State Association—E. Soper, St. Joseph; R. M. Williams, Cameron; Mrs. Lottie McVeay, Kansas City.

Arkansas State Association—H. M. Whelpley, St. Louis; J. M. Love, Kansas City; G. P. Hardesty, Kansas City.

Alternates—W. E. Berryman, Sweet Springs; Taylor Blow, St. Louis; S. M. Snodgrass, Walker.

NEWS ITEMS.

C. W. Tritschler leaves for the West in a few days.

A. J. Hoenny is spending his vacation at Putting Bay.

Henry Braun looks ten years younger for his western trip.

Adolph Braun has just returned from Elkhart Lake, Wis.

D. Gibson, Salem, Mo., was down buying goods on the 29th.

Chas. Seitz is just home from his vacation, spent at Salina, Kan.

Dr. K. Margener is opening a new store at 27th street and Choteau avenue.

W. T. Jones, head clerk for C. C. May, is at his home in Kansas on a vacation.

Julius Graf now has charge of the drug store owned by the late John Schneider.

Wm. Kramer, Grand and Kuth avenues, is just getting up from a sick spell.

H. W. Schultz, Ph.G., is opening a new store at Wellston, a suburb of St. Louis.

L. A. Seitz, 718 S. Broadway, has been spending his vacation at Middlebrook, Mo.

G. L. Blumb, head clerk for C. Klipstein, is quite sick at his home, Collinsville, Ill.

F. W. Kaenter, Ph.G., is now head clerk for J. Weinsberg, 10th and Lafayette avenue.

Alex Smith is now installed at the head of the O. C. Ruge Pharmacy, 19th and Hebert street.

The J. S. Merrell Drug Company are fitting out a store for Mr. W. O. Roper, Wellston, Mo.

R. H. Smiley purchased H. C. Brown's drug store at Moberly, Mo., and took possession August 21.

Wm. Bade, Ph.G., is opening a new store at 14th and Madison, opposite the Pauley pharmacy.

J. S. Porter, of 2001 Olive street, arrived home on the 27th from a two weeks' trip through the West.

Wm. Lennon is once more at the head of the City Hall drug store. He says he enjoyed his vacation very much.

H. W. Schultz, Ph.G., for some time a clerk in St. Louis, has just taken possession of a new store at Dehoidmont, Mo.

E. W. Raymond, manager of the Francis & Bros. pharmacy, has just got home from quite a trip through the East.

Solomon Boehm has just got home from a trip to Des Moines, Ia., where he attended a reunion of his old regiment.

Dr. Owen Krueger and Richard Krueger are here from Kansas City, visiting their father, druggist, at 2887 Choteau avenue.

J. Freiz, 1128 S. Broadway, says Knobbe, Ark., is the place to go fishing, as he caught more than he could bring home down there last week.

E. J. Schall, head of the patent medicine department of Meyer Bros. Drug Company has just returned from his vacation spent in the East.

J. A. Weipert, for some time prescription clerk for the Wolf-Wilson Drug Company, has resigned that position to go on the road for the J. S. Merrill Drug Company.

Max Schneider has resigned his position with the Adam Roth Pharmacy to accept the management of Mr. Bartlett's store, 82d and Chestnut street.

St. Louis is blessed, or —, with about 175 free dispensaries, and as they furnish their own medicine it is no wonder the druggists cry "hard times."

Jack Schoettler, who has been head clerk for Borton, Washington and Jefferson avenues, for about four years, expects to leave for New York in a few days.

The Oriental Manufacturing Company was organized a few days ago, headquarters at B. Sanger's pharmacy, 12th and Olive streets. Mr. Danger is Secretary. They expect to manufacture druggists' specialties.

Chas. Knecht sold his store at 1100 Autumn street to C. F. Wilson, who took possession on the 24th. Mr. Wilson has been clerking in the city for some time. Mr. Knecht will probably retire from business on account of poor health.

Oszmann, manager of the G. P. Kempp Drug and Paint Company, leaves the city in a few days for quite a vacation. Mr. Oszmann has been in very poor health for some time. Julius B. Huber will take his place while he is away.

IOWA.

DES MOINES, IA., August 14.—The long drought has caused almost a total failure of the potato and corn crops; and there is also a great shortage in vegetables, usually so plenty at this season of the year. The drought is the worst seen in Iowa in years; pastures are dried up and corn is as brown as the grass. This, taken with the hard times last year, is sure to have a depressing effect on business of all kinds. Wholesalers are, however, claiming that business is holding up remarkably well, when the prospects in the country are considered.

NEWS NOTES.

J. D. Stuart, of Council Bluffs, has sold his pharmacy to Miss Lou Massenberg.

The Sells Drug Co. are the successors to the Landis Drug Co. at Osceola, Iowa.

Henry Osborn & Son are the successors of Jos. Jennings & Co., Indianola, Iowa.

Adams & Linton have started a new store on Cottage Grove avenue, Des Moines.

Regular examinations for Registration are held by Secretary Spaulding every week at his office in State House.

J. D. Loper of the drug firm of Schwencker & Loper is trying his luck at fishing and hunting up at Spirit Lake.

The residence of Geo. Berdenkopf, a pharmacist doing business in Aborn Hotel, was burglarized and some \$1,200 worth of jewelry taken.

From being the largest city in the world without a saloon Des Moines has become a city of over 50 saloons and the number is rapidly growing.

Webb Souro, Des Moines, has completed the improvements to his pharmacy spoken of in our last and now has one of the handsomest stores in Iowa.

The assignee of the stock of goods of Coe Bros., pharmacists, 6th street and Grand avenue, advertises the same for sale at private sale July 25th.

Al. Jann, who formerly was head clerk for A. H. Miles, has been on a trip east for the last three or four weeks. He is seeing the sights in Baltimore and other cities.

A new store has been started at Ledyard, Iowa, by Dunlap & Co.

A. B. Cowles, who represents the wholesale drug house of Hurlbut, Ward & Co., has just returned from a three weeks' trip to Connecticut, where he was called by the death of his mother.

The recent cool weather has caused a heavy falling off on soda water trade. The extreme heat of the season, however, has made it a very prosperous one in that line in this section.

F. H. McArthur, the popular cashier and head bookkeeper for Hurlbut, Ward & Co., Des Moines, will spend the second and third weeks in August visiting friends in Chicago and Peoria, Ill.

Dr. Bilby of the firm of Priebe & Bilby, Des Moines, has bought his partner's interest and is refitting and refurnishing the store. The Doctor has many friends and will, no doubt, succeed in his venture.

Prof. S. R. Macy of the Highland Park Pharmacy School, Des Moines, says that the school will continue in session fifty weeks the coming year. This is a new departure and the success of it remains to be proved by experiment.

Frank Kedder, who until six months ago traveled North Western Iowa in the interest of Hurlbut, Ward & Co., will after August first again visit the trade as of old in the interest of the same firm. Frank is popular among the trade.

The Iowa School of Medicine, Des Moines, is preparing for the next year's session. Dr. Stoner is adding materially to the microscopical laboratory in the way of new instruments and appliances. The Doctor is a skilled and enthusiastic microscopist.

Fire visited the little city of Brooklyn, Iowa, the last week in July, and destroyed over \$150,000 worth of property. A large part of the business portion was destroyed. C. T. Rainsburg's pharmacy was totally destroyed. Stock valued at \$4,000; insurance said to be \$2,000.

The misplacing of the minutes of the last meeting of the pharmaceutical association by the stenographer is causing a delay in issuing the proceedings—Secretary Spaulding is doing his best, however, to make the report creditable, notwithstanding the loss of the stenographer's notes.

A thief entered the house of Geo. Beidenkopf, a pharmacist doing business in the Aborn House Block, Des Moines, Iowa, and stole diamonds and jewelry to the extent of about \$1,500. The thief was apprehended in Omaha where he was trying to dispose of the stolen goods. The jewelry and diamonds were all recovered.

B. G. Odeorne & Co., who have for the past two years been conducting a pharmacy at the corner of 10th and Center streets, Des Moines, propose moving into the new brick building now being erected on the corner of 9th and Center streets. It is reported that Frank Sheldon will put in a stock of goods in the building about to be vacated by Odeorne.

The Savery House Pharmacy, Des Moines, Iowa, has been purchased by F. P. McKay & Co., and will be continued in its present location. McKay has been head clerk for W. F. Crawford, the former proprietor, for several years and is a popular and deserving young man. The hotel company reconsidered its determination not to lease the room again for a drug store.

Prof. S. R. Macy of the Highland Park Pharmacy, lately made an analysis of the stomach and vital organs of Michael Smith, a railroad engineer who died suddenly and whose wife was supposed to have murdered him. The result of the professor's analysis showed the presence of eleven grains of arsenic in the stomach and also its presence in the liver and kidneys. Mrs. Smith is now spending a life sentence in the Anamosa penitentiary in consequence.

OHIO.

CINCINNATI, O., September 5, 1894.—The identity of the druggists who sold the strychnine to Martin Adams, which caused the death of John Ohmer, has not yet been discovered by the authorities. The celebrated case is still a leading topic in pharmaceutical circles and as stated in this journal some time since there is much anxiety as to the outcome of the trial. Adams is still in the county bastille and his case will not come up for hearing until the September term of court. The efforts of Coroner Querner to promise the druggist who sold the poison immunity from arrest have been in vain, as the authorities did not care to establish such a precedent. The number of new poison registers, however, has been increased to quite an extent and there is talk of an amendment to the existing poison law. As the legislature is now holding biennial sessions only, there can be no action in the matter until the coming winter.

SCHOOLS OF THE QUEEN CITY.

The winter session of the Cincinnati College of Pharmacy began yesterday and the most sanguine expectations of the members of the faculty as regards attendance have been fulfilled. The attendance is very large and the prospect is that more students are yet to come. The Queen City is becoming noted as an educational center on account of the number of schools, private and public, of the various kinds, which are doubtless the best in the middle states. Board is also very reasonable and the other inducements for students coming here are numerous indeed. The nice appearance of the College of Pharmacy building, was a matter of comment among the students yesterday who had not heard that the buildings had been entirely renovated and repainted. The session promises to be very successful in every way.

A DRUG CLERKS' ASSOCIATION.

During the past week there has been considerable talk in reference to the establishment of a Drug Clerks' Association. The prime movers in the matter are some of the best known clerks in the city. A meeting is to be called in the near future when the matter is expected to assume definite shape.

"TRIFLES LIGHT AS AIR."

Soda water is on the wane.

Birdsall Weatherhead won a gold medal at the Carthage Fair for fast riding on the bicycle.

Dr. John C. Otis, the popular druggist, is mentioned as a possible candidate for Coroner.

Local friends are glad to hear of John Haynes' success as Lehn & Fink's traveling representative.

The progressive pharmacists who could get away are at Asheville, N. C., attending the meeting of the A. P. A.

The local druggists who have been away are nearly all back.

The "Armory Pharmacy" is the title of Ed. Bachus' new drug store in the West End.

Wilmot Hall has had both of his stores renovated and they present a decidedly improved appearance.

Louis N. Bertube, the clever Avondale druggist, has just returned from a visit to his old home in Pennsylvania.

Billy Fee, the popular city salesman of the Standard Drug Company, is quite a masher with his new moustache.

The new drug store owned by Miss Cora Dow in the Grand Hotel building is now kept open until 4 o'clock A.M.

Dr. Charles Wocher's pharmacy was damaged by fire a few nights since, and adjacent property had a close call.

Louis Klayer, the popular pharmacist at 7th and Elm streets, made a trip to Chicago one day last week on business.

Johnny Bauer has given his incandescent lights the "shake" and his store is now lighted with new style patent lamps.

Lloyd Brothers are preparing to remove a large portion of their stock to their elegant new warehouse in the West End.

Harry Gradel, the Mount Auburn pharmacist, is putting the finishing touches on his elegant new store room on the hill.

"Uncle" John Keeshan, the veteran druggist, is glad the warm weather is over, as he had an awful seige with the hay fever.

Prof. William Simonson, the well-known chemist at 9th and Race streets, is stocked with work, the most of which is being done for the city.

Dr. Louis Sauer, the pharmacist at Baymiller and Central avenues, is back from his summer vacation and he is as brown as a berry.

It brings back the memories of years ago to see Ed. Dehner back at Weatherhead's drug store again. Ed. talks of studying medicine.

Louis Kusnick, the popular young prescription clerk at Weatherhead's Pharmacy, spent last Sunday evening calling on friends at Riverside. What's up?

Louis Heister is a consistent student of the market, and there are few changes in the price of anything that Brother Heister doesn't know as soon as any of his neighbors.

Fred Kiaker, who has been with the popular firm of John C. Otis & Company for several months past, is now the manager of Zwick's new store, on Elm street near Sixth.

Otto Ranchfuss, the senior member of the Standard Drug Company, had his whiskers trimmed the other day and when he returned to the store the boys didn't know him.

Will Wagner and Andy Bain, who are running the long established drug store at 7th and Walnut streets, are both happy, as most of the doctors are home from their summer vacations.

Drs. DeBeck, Tharsher and Freiberg are installed in elegant new offices along with Dr. Ranschoff, in the latter's pretty building on Walnut street. The structure has been entirely metamorphosed.

The commercial travelers are getting as thick as bees in harvest time, which is a sure indication that times are much better than they were a few weeks ago. Many familiar faces were seen in the city last week.

Al Boehmer, the clever owner of the City Hall Pharmacy, is the proprietor of a preparation for the cure of a drunk in a very few minutes, and he thinks he has a big winner in the new medicine.

Ed. Gray, the well-known druggist at Fifth and Main streets, has had his store fitted up, and most of his friends who have been away for the summer didn't know the old place when they got back to town.

Fred Bingman, the Mt. Auburn druggist who has been ill for some time past, has recovered his health and is again on duty at the old stand. The hilltop boys are all glad to see Fred back at his place again.

Dr. Werner, the well-known member of the firm of Werner & Simonson, has his hands full now since the College of Pharmacy opened, as his partner is kept pretty busy instructing the young men in the mysteries of chemistry.

Mrs. Nancy Weatherhead, the venerable mother of Dr. R. H. Weatherhead, died in Chicago a few days ago. The deceased was 93 years of age and lived in this city for upwards of twenty years. Her death occurred at her daughter's home.

Martin Dodsworth, the urbane pharmacist in the new Odd Fellows' Temple, has one of the prettiest stores in town now and reports business as picking up wonderfully. He has one of the most complete stocks of goods in the downtown portion of the city.

RICHMOND, VA.

F. M. Reade of the Park Block pharmacy was recently married.

Dr. M. A. Hoge has been elected to the chair of Microscopy in the same department.

Chas. Lath has returned to Richmond after an absence of several years in Atlantic City, N. J.

There has been a new Foundling Hospital established on Church Hill. Dr. W. W. Parker is one of the chief officers in charge.

The city drug store at 8th and Main streets, has been vastly improved by being built higher in front and the addition of larger windows.

The additions to the buildings of the above named college are nearing completion, which is a necessity, since the session begins Sept. 15th next.

B. F. Eubank, manager for Mrs. W. F. Richardson, 17th and Venable, was recently married to Miss Mand Sheppard of South Easton, Virginia.

Dr. G. K. Baylor, for a number of years a pharmacist in this city, and recently apothecary on the Monitor fleet stationed below the city, is dead.

In a recent analysis of cream tartar purchased from various drug and grocery stores, it was discovered that that sold by pharmacists was almost absolutely pure, while the grocery store cream tartar was grossly adulterated in four out of six samples!

The new poison labels are being very generally adopted by the druggists of Richmond, in obedience to the act of the legislature at its last session in which it requires all poisons in schedule "B" in the act regulating the practice of pharmacy to be labeled with at least two antidotes for that poison.

Dr. James R. Jones, senior resident physician to the Retreat for the Sick, has been elected by the Faculty of the University College of Medicine to the chair of Analytical and Pharmaceutical Chemistry in the Pharmacy Department of that Institution, vice T. Wilber Chelf, resigned.

Dr. Louis Wheat, while performing an operation on an old colored man at the Virginia Hospital here, was severely blood poisoned in a cut or scratch on his finger. He had left the city when he saw what had happened, and not having any anesthetics he took his instruments and deliberately cut the first joint of his finger off by himself! Not once only, did he cut it, but several times, till finally a brother surgeon cut the whole finger off, soon after which the doctor went to Baltimore to remain in a sanitarium till his nervous prostration was cured.

ILLINOIS.

CHICAGO, September 10.—Trade is on the mend, although buyers are coming in slowly and purchasing only stock and staple goods. There are prospects for a good holiday business, although the wholesale men do not anticipate a great demand for plush goods. The depleted stocks incident to the unsettled political conditions, and reduced still more by the recent railroad tie-up, are being braced up and the general feeling is one of much better times in the near future. There will be no hurried reaction from the dull times, but a steady, prosperous growth, until the good times of the past are reached. Retail dealers are well satisfied with the indications of an upward tendency in that direction. The soda fountain trade has been enormous this summer, running the World's Fair records close and in some instances exceeding them. The proprietor having a big fountain in a good locality has reaped a harvest. Especially is this true in some of the residence districts, where the people, accustomed to leave for the summer, have remained at home this year and the druggist has received the benefit. The soda sale runs into long figures, and every branch of his business has felt the effects.

MOXIE MAKES TROUBLE.

The Moxie Nervine people have been making it decidedly disagreeable for several Chicago druggists lately, and there is no exact way of finding when they are going to let up. According to a leading retail druggist, the Chicago agent, a man named Wallace, engaged in the manufacture of the article himself and sold large quantities of it himself, of course keeping the company in ignorance. After awhile the company was informed and sent men to Chicago to investigate. This was followed soon by a resignation, a suit and judgment for \$40,000 and a change in the method of doing business. The next chapter showed a couple of men visiting soda fountains, calling each for a glass of "Moxie," and, being waited on, emptying the beverage into a bottle and walking away. A few days later representatives of the company appear and threaten to bring suit for damages, infringement, etc. This is on the ground that either the original compound as prepared by the company has been tampered with or another is being sold under that name. Again, the company representatives insist that no Moxie purchased within the past six months except in large bulks is genuine, and that nearly all that now in use is spurious. The latter proves to be a mistake in some instances, dealers having

bought by the barrel nearly a year ago. Several of the dealers have paid different sums to avoid prosecution, but others claim that the compound cannot be used as a beverage without the addition of large quantities of sirup, and the company considers this as tampering with the original.

UNLICENSED PHARMACISTS TO BE PROSECUTED.

The first meeting of the Cook County Homeopathic Medical Society since its organization last May, for the discussion of topics, was held at the Grand Pacific on the night of August 30. Papers were read by Drs. Jos. P. Cobb, R. N. Tooker, W. A. Smith and H. C. Allen. The papers were the first in the series on disorders of the alimentary canal, that will occupy the Fall meeting of the society.

Peter Van Shaack & Sons are having trouble with some young men who have been working bogus orders on them. The modus operandi or extent of the operations have not yet been revealed, but three of the men are now under arrest, and will be prosecuted. The men secured possession of the regularly printed blank orders and filling them out obtained a considerable quantity of goods. It is understood that the house will prosecute vigorously.

The Medical College School of Dentistry of Milwaukee is suffering from internal dissension, five members of the faculty have tendered their resignation, giving the reason that the new college is being governed too much for commercial purposes. Those who resigned are Doctors L. J. Stephen, Claude A. Southwell, P. W. Gardner and W. C. Wendell, of the department of clinics, C. W. H. Carson, special lecturer on prosthetic chemistry. A doubt is also expressed if Milwaukee can afford a first-class dental college.

Every few months the dispatches from Springfield announce broadcast that the State Board of Health is on the warpath against druggists, or alleged druggists, who are engaged in the business of vending medicines without proper state license. On August 25 the telegraph announced that contracts are now being made with States'-Attorneys in all the counties in the state for the prosecution of itinerant vendors of medicine. The States'-Attorney retains the entire fine as his compensation. According to the law, each itinerant vender of medicine in the state shall pay a license fee of \$100 per month to the State Board of Health, and the penalty for non-payments is a fine of from \$100 to \$200 in each offense. The board also announces that the regulation providing for the submission of samples of all medicines sold by vendors for chemical analysis will be rigidly enforced.

CURRENT NEWS.

H. Swanell, of Champaign, Ill., was in selecting some holiday goods for the early trade.

John Saunders, of the sundries department of Morrisson, Plummer & Co., has gone to Colorado to try that climate for his failing health.

Tom Sanders, of Sanders & Sherer, Wm. Bussey, of C. A. Goodwin & Co., both of Aurora, Ill., have been in the city within the past few days stocking up.

Robert Case, of Decatur, Ind., Will Smith, of Delavan, Wis., and L. A. Fisher, of Hawkeye, Ia., have recently bought outfits of Morrisson, Plummer & Co.

The annual business session of the officers of the National College of Women Physicians and Surgeons, of this city, was held recently. Routine business was considered.

Gustav Holman, a drug clerk who lived at No. 9087 North Halsted street, was drowned in the lake while bathing, the morning of Aug. 25. A heavy sea was running and while his cries could be heard, his companions could not rescue him. The body was recovered.

Licenses to practice medicine and surgery in Illinois were issued by the State Board of Health to: Charles Dake, S. Rosenbaum, W. J. Class, J. B. D. Godfrey, F. E. Andre, T. J. Buskley, and A. D. Davidson, all of Chicago; J. C. Defries, Melvin; W. C. Stables, Lewisburg, O.; H. C. Hill, Sweetwater, and V. M. Powell, Peoria, Ill.

NEBRASKA.

BEATRICE, Sept. 4.—Some members of the A. P. A. are in attendance upon the National Convention at Asheville, N. C.

The Nebraska law does not register licentiates, or graduates in pharmacy except upon examination by the full board at the regular session.

The drug business in Nebraska is very much depressed in consequence of the failure of crops in some sections and consequently there are quite a number of failures to report in this line.

At the meeting of the Nebraska State Board of Examiners held at Beatrice, August 8, for the examination of applicants for registration, the following persons were successful in their examination: Gratz Barnes, Lincoln; John A. Bilan, Weston; John B. Davis, Jr., Stella; E. C. Felton, Bradshaw; H. M. Hepperlens, Harbine; W. B. Kinnmon, Fairmont; W. G. Larimer, Ong; H. C. Moore, Bruning; J. A. Morley, University Place; Frank R. Miller, Hastings; John L. Madden, Alliance; Carl G. Norseen, Aurora; J. E. Thygeson, Utica; Charles J. Wilcox, Palisade. The next meeting of the board for examination will be held at Lincoln Hotel, Lincoln, Wednesday, November 14th. Omaha, at Hotel Delone, Thursday, November 15th. Examination beginning at 9 A.M.

WESTERN NEWS NOTES.

J. R. Hurlbut of the Wholesale Drug House, Hurlbut, Ward & Co., Des Moines, has been visiting in Cincinnati, Ohio.

Fire came near destroying the entire town of Belles Plains, Iowa. The losses run up near \$500,000. We have not heard the amount of insurance, nor a list of who were the unfortunate.

Dr. Beha has resigned the chair of Botany in the California College of Pharmacy, and his place is now filled by Prof. J. J. B. Argentinini, who is also professor of microscopy and vegetable histology.

Stroud & Diddy who lately bought the stock formerly owned by Wm. Bauer, cor. 8th and Locust streets, Des Moines, have thoroughly refurbished the store. They report business good. They are young men and very popular.

Edward Sauerhering of Mayville, a member of the Wisconsin Pharmaceutical Association, who took an active part in the last convention, will in all probability be the Republican candidate for Congress in the Second Congressional district of Wisconsin. Mr. Sauerhering is at present chairman of the Dodge County Republican committee and is a gentleman very popular with the masses in the district.

The Wisconsin State Board of Pharmacy, through its secretary, has entered upon a crusade against the sale of Paris green by grocery, general and hardware stores contrary to the law. Two cases of this kind have been brought. The first was against a Janesville firm of hardware dealers, and they were fined \$50 and costs. The case of the State vs. Yahr Bros. of Princeton, for selling Paris green without having it labelled poison, was tried at Berlin, where the jury brought in a verdict fixing the fine at \$50 and costs.

NOTES ON PRICES.

Wholesale Druggists' Prices.

Below we give a summary of the more important changes which have been made in the "Prices Current" since our last issue. These figures represent the prices at which retailers purchase goods in ordinary quantities.

ACIDS.—Benzoic, German, has advanced to 78c.; carbollic, crystals are now quoted 20 @ 35c.; citric acid is lower at 40 @ 45c.

ALCOHOL has advanced to \$2.66 @ \$2.81; cologne spirit is quoted \$2.76 @ \$2.91.

BALSAMS.—Fir is quoted at the range of 45 @ 50c., a decline of 5 @ 10c. from previous prices; Peru is lower and quoted \$2 @ \$2.25.

BEANS.—Tonka, Angostura, have declined to \$2 @ \$2.25.

BERRIES.—Cubeb have declined and are now quoted 25 @ 30c.

BLUE VITRIOL is now quoted 4 @ 4½c.

BORAX is quoted 9 @ 12c. and powdered at the same range, a decline of 1c.

BUDS.—Balm of Gilead have declined to 45 @ 50c.; former price 50 @ 60c.

CIVETTE has advanced and is now quoted at \$5.50 @ \$6.

COCAINE.—Alkaloid has advanced to \$6.50 @ \$6.70; muriate is also higher at \$5.70 @ \$5.95.

ERGOT, Spanish, has declined to 30 @ 35c., and powdered, 25 @ 40c.

OPUM has declined to \$2.10 @ \$2.25; powdered is also lower at \$3 @ \$3.25.

MANNA, large flake, has declined 10c.

OILS.—Anise has advanced to \$1.85 @ \$2. Croton has declined and is now quoted at \$1 @ \$1.10; Cubeb is easier, at the range of \$1.75 @ \$3.50; linseed has declined, with boiled quoted 55 @ 58c., and raw 58 @ 61c.

PEPPERMINT has declined to \$2.25 @ \$2.85, and Hotchkiss, \$2.75 @ \$2.85.

TANSY has declined to \$2.25 @ \$2.50.

JALAP is now quoted 35 @ 40c., and powdered 40 @ 45c., a decline of 5 @ 10c.

Western Prices.

W. H. Torbert, wholesale druggist, Dubuque, Iowa, issues a circular under date of August 28, 1894, in which he says: 1894 has been an eventful year. Conditions disastrous to trade have obtained throughout the world, but in no country and at no time have the causes conspiring to depress trade been more numerous than in America in the current and preceding year. Fortunately the country has stood up well under the shrinking in values and poor business; and the failures this year are much less in number and amount than in 1893. With tariff legislation completed, with strikes subsided, and, withal, taking a hopeful outlook for the future, with the various estimates of

forty to fifty per cent. of average crop in bushels, and seventy-five to eighty per cent. in value, trade is showing marked signs of improvement. Since our last issue the demand for Paris green was unusually large, and we were enabled to fill all orders from our regular customers.

ALCOHOL IN THE ARTS AND IN MEDICINE.

By the provision in the recent tariff bill, alcohol for medicine and arts will be relieved of a tax of \$2.20 per gallon. This is a feature in tariffs for which our Mr. Torbert has made very great effort; and the efforts, which it may be truly said that he inaugurated, have crystallized through the combined efforts of others into the present legislation relieving drugs of an onerous and unjust tax, and relieving the people who require medicine of what was a little less than a "blood tax." We congratulate the druggists of this country on this bright spot mid the universal disadvantages that to-day are surrounding the drug trade. This will not go into effect until the provisions for its execution are arranged by the treasury department of the government. Whisky, brandy, gin, etc., advanced twenty cents on account of tax. Also all straight whiskeys have increased in value on account of another summer added to age, making the net advance for both tax and age of about forty cents per gallon on double stamped straight goods over a year old.

LINSEED OIL.

That trusts, combinations and monopolies are inimical to the interests of retail buyers everyone recognizes. Yet many retailers fasten the chains that bind them to high prices by giving such monopolies the preference over dealers who are endeavoring to promote the interests of consumers and buyers. The operation of a monopoly is well illustrated in the course of linseed oil. At no time since August 1 has linseed oil been worth over 51 cents for raw and 54 cents for boiled in single barrel lots. We have quotations of some mills showing that the carload rates since that time have been 49 and 52 cents; adding two cents for jobbers' profit would make the regular price for jobbers 51 and 54 cents, at which price we are now selling, and we are able to fill all orders as wanted. Parties who have paid more than 51 and 54 cents since August 1 have simply been paying tribute to the greed of monopoly.

MARKET REVIEWED.

Demand for acetanilid light, market lower. Acids—carbollic firmer; citric declined; salicylic reduced; alcohol advanced; price to-day by the barrel \$2.50, less eight cents per gallon for cash ten days. This quotation is without engagement, and orders received by mail and through our travelers are subject to the market price on day of shipment; usual advance for smaller packages. Alum weaker; bismuth and its preparations lower, see list; camphor advanced and will rule higher; flowers, chamomile, German and Roman, new crop handsome, and prices lower; cocaine advanced. Balsams—copaiva firm; fir without change; Peru steady; Tolu in light demand. Barks without material change, except sassafras, which for fine selections commands advanced prices. Berries—cubeb and juniper lower. Blue vitriol active; caffeine advanced; cuttlebone declined; arnica, good quality, held firmly. Gums—Arabic active; assafoetida firm; kino scarce. Leaves—buchu steady; senna firm. Seeds—coriander advanced. Menthol higher; morphine without change. Essential Oils—anise quiet; peppermint declined. Opium easier. Chlorate of potash weak; bichromate of potash reduced; yellow prussiate of potash firm; quinine advancing; quicksilver unchanged. Roots—juniper firm; ipecac declined; senega lower. Beans—Vanilla firm; Tonca advanced.

BEESWAX.—The market is steady, and for prime yellow wax we will pay 22 cents per pound delivered in Dubuque, and shall be pleased to receive your shipments.

Playing cards advanced 24 cents per dozen—amount of tax.

GINSENG.—We are large purchasers of ginseng, and to parties having ginseng to sell we shall be pleased to submit quotations either on receipt of sample of the root or upon advice stating quality and quantity of the root for which quotation is desired. We hope to receive your shipments of beeswax, senega and ginseng.

Chemicals.

The September price current of the Roessler & Hasselacher Chemical Co. remarks that the numerous changes made in the chemical and other schedules of the new tariff has affected chemicals to only a limited extent, so that few actual changes can be reported as due to the new measure; especially as in some instances the lower duties have been counteracted by advances in the market prices. There are also errors of type in some of the provisions that leave the question of duty, but not the intent of the law, very much in doubt. The following are the changes affecting the line of chemicals handled by the Roessler & Hasselacher Chemical Co.:

CARBONATE OF AMMONIA, changed from the specific rate of 1¼ cents per pound to that of 20 per cent. ad valorem, brings a reduction, which, however, has long since been discounted by the low prices ruling here against those of abroad.

CHROMIC ACID is reduced from 6 to 4 cents per pound, and changes our selling price to the full extent of the reduction.

OXIDE OF COBALT has been reduced from 30 cents to 25 cents per pound, which will make a corresponding change in our price.

YELLOW PRUSSIAN OF POTASH, changed from the specific duty of 5 cents per pound to 25 per cent. ad valorem, brings us no change at all, for the new duty based on the present prices abroad, equals the old specific duty of 5 cents per pound.

RED PRUSSIAN OF POTASH is reduced 2 cents per pound by reason of the change from a specific duty of 10 cents per pound to 25 per cent. ad valorem.

SAL AMMONIA The constant advance of values abroad more than wipes out the slight reduction effected by a change from ¼ cents per pound to 10 per cent. ad valorem. Our prices, therefore, for all grades, remain unchanged.

SULPHATE OF ALUMINA has been reduced from 60 cents to 40 cents per 100 pounds, and the full reduction will be felt at once.

Outside of these changes caused by the new tariff law, there are a few others to note. In

ANILINE OILS AND SALT the market abroad shows firmer, but to what extent this will influence prices here remains to be seen.

OXALIC ACID continues higher, and there is every prospect that with a good consumptive demand the market will soon reach the level of manufacturers' prices.

The English Chemical Market.

S. W. Royle & Co., chemical, mineral and metal brokers, Manchester, issue the following report under date of August 25:

With the settlement, for the present, of the United States tariff question, there is expected to be some improvement in business generally, though trade there has for some time now been so disorganized that any real improvement will probably be of slow growth. The settlement of this question should, however, at least have promptly a steadying effect upon trade generally, and probably cause an early improved demand for some chemicals, of which stocks on the other side have been kept running very low meantime. For the present the values of alkalines are remaining steady, and bleaching powder is having a good demand, some makes being well sold up to the end of this year; caustic soda has a moderate inquiry and

soda ash (especially ammonia soda), is difficult to move. Bicarbonate of soda is moving fairly well, but soda crystals are very dull, and chlorate of potash is easier. Among buyers of alkalies there is now more disposition to cover for next year, and some business has already been done. The Board of Trade returns for the seven months ended July 31 last, as compared with those for corresponding period of 1893, show in the exports of alkali, a decrease in weight of 29,195 tons, and in value of £111,670, and in the exports of bleaching materials, a decrease in weight of 11,881 tons, and in value of £112,885. In the tar product branch pitch may specially be noted very firm, and high prices continue to be paid for both early and forward delivery, with stocks only moderate in both makers' and consumers' hands. Solvent naphtha is easier, but not markedly so; sellers seem rather more inclined to meet buyers' views, but there is no pressure of stocks. Creosote maintains its high level of value, and is expected to do so, as the Scotch coal strike is keeping supplies low. Carbolic acids of all qualities are dull and rather lower in price. Acetates of lime are quiet, buyers' wants being well covered, but prices are firm, and expected to improve before long with the customary advance in freights from America. Acetate of soda is rather dull on spot, but there is more inquiry for forward delivery, prices ruling very low and steady. Acetates of lead are quiet, and the recent reduction of 2s per ton in foreign white has caused no increased demand. Nitrate of lead is moving better. Prices of alum for export have been reduced 5s. per ton. Carbonate of ammonia has less inquiry, and muriate of ammonia is rather easier. Carbonate and caustic potash are quite firm, and prussiate of potash maintains its value. Green copperas is difficult to move. Oxalic acid is selling better, and convention prices are now more easily obtainable.

Rock Candy Prices.

Hereafter the price of rock candy will be governed by the price of sugar, and there will be a uniform difference of three cents between the price of sugar and the price of red and white rock candy, the price of the yellow being four cents above the sugar quotation. The new arrangement went into effect August 28, the advance being $\frac{1}{4}$ c. per pound over the figures heretofore quoted for rock candy.

Chicago Druggists and the New Tariff.

PETER VAN SCHAAK & SONS.—Peter Van Schaack, the senior member of the firm, says: We already have evidence of a marked increasing demand for goods from all sections tributary to Chicago. The fact is that stocks in the hands of retail merchants in the country are very light—never more so, though not vitally affected by the tariff—excepting in the case of alcohol. The trade seems to feel sure of a more settled state of affairs and is pushing ahead on orders. It is not so much a large increase in the number of orders as the volume. I think the tariff action, however late, is not too late to affect favorably fall trade in the drug line. In conversation with many buyers from different sections it is gratifying to observe the satisfaction at the passage of a bill. Jobbers in our line have stocked alcohol very heavily, and wisely, as there has been an advance so far of about 26 cents a gallon, which will realize a very handsome profit to those few who have taken precaution to stock up. I hope the country will now have a rest on the tariff—it has been one of the most important factors in the disarrangement of commerce. I have no doubt the balance of the year will quite realize the conservative merchants' expectations of trade, though probably the drug line has been less unfavorably affected by the times than any other, from the necessities of the demand. We have noticed the marked improvement has been felt among city druggists as well as in the country, and within a few days we have sold three entire drug outfits which had been holding back on account of the uncertainties as to action on the tariff. It is a fact that the

strike diverted some trade from Chicago, but the large and well assorted stocks carried here and the liberal methods of conducting business will turn the current towards a market of such a character and possessing such facilities.

LORD, OWEN & Co.—We regard the outlook for an improvement in business matters good. Reports we are receiving from all parts of the country indicate while there may be no rapid improvement it is certainly bound to come. As evidenced by our own sales our country trade this month and last is in excess of the same period last year. There is more or less complaint as to collections on account of the drought in certain localities, but no more than are yearly received from some sections.

MORRISON, PLUMMER & Co.—Jonathan W. Plummer, President. The delay in action in the tariff has been disastrous, and continued doubt would be more so. We were not quite sure, as two or three radical changes were presented in the popgun bills sent to the Senate. But since the bill has at last gone through, we now know where we are, and things can be arranged to suit. We are entering on an era of prosperity. The tariff affects the drug business but little, although we cannot tell what effect it will have upon home producers. We are simply merchants. Bad crops will be felt perceptibly by all branches of trade and the country generally. As soon as the tariff question is absolutely settled industries will spring up here and there as the demand will support.

FULLER & FULLER.—Oliver F. Fuller, President. The tariff has as good an effect as such a measure can have. There will not be much of a revival of business for the next year, although the conditions will probably improve at once. As to the bad crops, the farmers get about as much out of a partial crop as a full one, prices advancing on the scarcity. There are few items in the tariff that affect our line of business.

Review of the Wholesale Market.

NEW YORK, Sept. 12, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

Business in the several departments of drugs, dyestuffs, and chemicals has been slightly more active during the past fortnight, and a general improvement in the position of most staples is to be noted. A busier and stronger market is looked for as the season advances. With an increased inquiry for general goods, prices are given a firm support, while holders evince no disposition to urge sales by concessions from fixed prices. It is the opinion of many in the trade that a lack of knowledge concerning the new tariff regulations, is causing many interior dealers to delay operations. The failure of the Washington authorities to give a definite decision with respect to the operation of the free alcohol section is also contributing to a feeling of hesitancy on the part of many consumers. Opium continues dull and easy. Quinine is steady and firm. Cream of tartar, tartaric acid and tartrates are developing strength and an appreciation in value is anticipated. Cocaine and its salts have advanced. Acetic acid is developing an upward tendency. Codeine has declined. Oil anise is higher. Star anise is firmer. Borax

has declined. Among other changes we report lower prices for oil wintergreen, liquorice extract and bay rum. Nitrate of silver is slightly higher, and alcohol has been advanced by the Trust.

ADVANCED.

Alcohol.
Cocaine.
Cream Tartar.
Tartaric Acid.
Acetic Acid.
Oil Anise.
Civet.
Spermaceti.
Jalap.
Silver Nitrate.
Colocynth.

DECLINED.

Opium.
Ergot.
Croton Oil.
Codeine.
Caustic Soda.
Citric Acid.
Celery Seed.
Oil Wintergreen.
Borax.
Liquorice Extract.
Castor Oil.

DRUGS.

ALCOHOL, wood, continues unsettled in the face of the probability of the removal of the duty on grain alcohol for use in the manufacture of pharmaceutical preparations. The price of the latter has been advanced by the Trust to \$2.49 @ \$2.51 net. Independent producers are filling orders at \$2.47 @ \$2.49 net.

ARNICA FLOWERS have been in demand and we are reported a sale of 2,000 lbs. at 9c.

BALSAM COPAIBA is firmer, owing to limited supply. Central American is arriving slowly and stock in first hands is very low. More attention is being given to the Para and Angostura varieties, and prices are well sustained on the different grades.

BALSAM FIR, Canada, is in better export demand and values are hardening. Of the several sales reported the quoted figures were not below \$2.50.

BALSAM PERU from the hands of importers is offering at \$1.65; jobbers are quoting \$1.70 @ \$1.75.

BARKS of all kinds remain quiet, though without special variation in prices.

BAY RUM, imported, is lower under the new tariff regulations, with the present quotation \$1.80 to \$2.

CAFFEINE is somewhat scarce and prices have advanced to \$3 @ \$3.10.

CANTHARIDES are in good inquiry and firm, though no large sales are reported.

CASTOR OIL is affected by the new tariff and values have declined. AA in barrels is quoted 10 $\frac{1}{2}$ c., and cases 11c.; crystal, 11 $\frac{1}{2}$ c. in barrels and 12c. in cases.

CASSIA BUDS are quoted 18 $\frac{1}{2}$ @ 19c. Small sales are reported within this range; an advance on these figures is quoted for large lots.

CHAMOMILE FLOWERS.—The new crop of German is reported to be an unusually heavy one, but prices have undergone no quotable change, as prime grades are yet scarce.

CIVETTE is scarce and higher, \$8 being required for Aden.

COCAINE and its salts have been marked up. The new quotations for muriate are: Bulk \$5.20, ounce vials, \$5.35, half do, \$5.30, quarter do, \$5.35 and eighth do, \$5.45. In quantities of 100 ounces or more orders would be accepted at a reduction of 20c. from above quotations.

COLOCYNTH APPLES are in improved position with 38c. now quoted inside for Trieste, and higher prices asked for best grades.

CODEINE has been reduced 10c. per ounce, bulk in lots of 5 ounces being quoted \$3.80 and less quantities \$3.95.

COD LIVER OIL is working into better position and \$27 is now regarded as an in-

side price for quantity lots of Norwegian.

CUREB BERRIES continue dull, with natural now offered 11 @ 12c. and stemless at 14 @ 16c.

CUTTLEBONE, Trieste, is meeting with active inquiry and numerous sales are reported within the range of 8 @ 8½c.

ERGOT is inactive, new crop from abroad is offered at the equivalent of 15 @ 16c. for German, and 17½c. for Spanish.

LYCOPodium is less actively inquired for and quotations are nominally unchanged.

MENTHOL is still in limited supply and values are firmly sustained at the range of \$5.75 @ \$6.

OPium continues dull and neglected, consumers and dealers appearing to manifest no interest whatever in the article. Prices continue to rule firm upon the previous basis, holders showing no disposition to increase the distribution by concessions. Original packages are obtainable at \$1.92½, though possibly a trifle less could be done upon a firm bid for large quantities. This figure also represents the figure quoted for jobbing quantities. Powdered is offered with increased freedom, with down to \$2.62 @ \$2.65 quoted as acceptable.

QUININE continues in strong position, but prices have undergone no material alteration since our last report. Some business in German is being done at the previous range of 24½c. @ 24¾c. as to brand, regular terms. There is some talk of a revised scale of manufacturers' prices soon to be put into effect, and a further appreciation in values is anticipated.

SAGE, Italian, is selling in small lots at 5c.

STRAMONIUM LEAVES are passing out to the trade in moderate jobbing lots within the range of 6 @ 7c. Among recent transactions we note a sale of 1,000 lbs. at 6¾c.

SPERMACEI, owing to scarcity and an improved demand from exporters has advanced to 88c. in bulk, and 84c. in cakes.

SANTONINE comes lower, owing to the reduction in import duty, and the quoted price is now \$2.50.

TONKA BEANS, Angostura, are working into firmer position, with the current sales at \$1.60 @ \$1.70.

DYESTUFFS.

CUTCH is meeting with an active jobbing inquiry, and the market is well sustained upon the basis of 5¾ @ 6c. for prime quality bales.

GAMBIER continues in moderate demand with most holders quoting store goods 4½c. as inside, while up to 4¾c. is wanted for jobbing parcels. Stock in transit does not offer below 4¾c. and a similar price is asked for forward shipments.

DIVI DIVI continues in moderate demand with the current sales within the range of \$60 @ \$70.

NUTGALLS, Chinese, are scarce and firmer, a restriction in supplies being looked for in consequence of the war over Korea.

SUMAC, Sicily, is in good request, but scarce and values are well sustained upon the basis of \$60 @ \$65.

CHEMICALS.

The new tariff regulations are responsible for a number of changes in the prices of the heavier chemicals, though the anticipations of many in the trade with regard to the looked for revision of price

on chemical preparations in the manufacture of which alcohol plays a part, have not been wholly satisfied.

ACETIC ACID and the acetates of lime which are by-products in the manufacture of wood alcohol are likely to undergo an appreciation, the alcohol being affected by the proposed rebate of tax on grain alcohol to manufacturers of pharmaceutical preparations. Prices are firmer at an advance since the Corman Tariff Bill passed into law. Acid is held and selling freely within the range of \$1.65 @ \$1.75.

ACETATE OF LIME is somewhat unsettled from the causes noted above and prices are only nominal at 1¼c. @ 1½c. for brown and 2c. @ 2¼c. for gray.

BORAX is reduced 1c. per pound on all grades as a result of the reduction in duties. California refined is now quoted at 7 c. in car load lots and 7¼c. @ 7½c. in smaller quantities; concentrated at 6½c. @ 6¾c. and city refined at 7½c. in 25 bbl. lots, 7¾c. in 5 bbl. lots and 8c. for smaller quantities.

BORIC ACID, domestic, is lower at 10¼c. for crystals and 11c. for powdered in barrels. The same figures are quoted for imported.

CHLORATE OF POTASH is in slightly improved demand, but prices are unchanged 11½c. @ 11¾c. representing the range for crystals and powdered respectively.

CITRIC ACID has declined to 37½c. @ 38c. for barrels and kegs respectively.

CREAM TARTAR is in improved position owing to a higher market for argols, and 17½c. @ 17¾c. is now quoted firm for powdered.

NITRATE OF SILVER has advanced in sympathy with the market for the metal and 42¾c. is now quoted for 1,000 oz. lots with the usual difference for smaller quantities.

OXALIC ACID is maintained firmly at the previous range of 7c. @ 7½c. for German and English.

QUICKSILVER is selling in moderate quantities to consumers and the trade at 49c. @ 50c.

SAL SODA, English, is offering at 75c. @ 80c. and domestic at 72½c. @ 75c.

SODA CAUSTIC; prices are revised as follows: 60 per cent. \$3.40 @ \$2.65; 70 @ 74 per cent. \$2.20 @ \$2.32½.

TARTARIC ACID is showing a stronger tendency and manufacturers are asking 22c. @ 22½c. for crystals and 22½c. @ 23c. for powdered.

GUMS.

ALOES, Curacao, are easier, with the current sales within the range of 2¾c. @ 3c.

CAMPHOR is in good request and prices are firm upon the basis of 42c. @ 43c. for cases and barrels.

CHICLE is strengthening and supplies are held at 28c. @ 30c. though business is rather restricted.

SHELLAC is meeting with a satisfactory demand from consumers and the trade and prices are firm at recent quotations.

SENEGAL, TRAGACANTH, and other medicinal descriptions are unchanged.

ROOTS.

ACONITE, ALKANET and ALTHEA are meeting with moderate jobbing inquiry at the previous range.

GENTIAN has been in demand and we note among other transactions sales of 6,000 lbs. at 3¼ @ 3½c.

GINSENG continues to find a moderate

consuming outlet within the range of \$2.50 @ \$3.25 for North Carolina and New York respectively.

GOLDEN SEAL is slightly easier and we hear of some sales at 19c.

IPECAC is quoted higher abroad and is held with increased firmness, 90c. @ \$1.10 being the quotation range as to quality.

JALAP is quiet but holders quote 24c. for best grades.

SENEGAL remains quiet, though no disposition is shown to shade 82c. for Minnesota.

SARSAPARILLA, Mexican, is dull at 7¼ @ 8c.

SNAKE, Texas, continues held at 22c. @ 25c., though no sales in consequence are reported.

SEEDS.

ANISE is in moderate jobbing demand, and we hear of sales at 8c.

CANARY, Smyrna, is offering at 8¼c. @ 8¾c. Sicily is slightly higher, with cable advices reporting an advance to the equivalent of 4c. laid down.

CELERY is quiet and the price has receded to 11c. @ 11½c.

CORIANDER is scarce and the quotation is marked up to 9c., with numerous small sales reported at this figure. October deliveries are quoted at 7¼c.

HEMP, Russian, is scarce, though small parcels may yet be obtained at 2¾c.

MUSTARD, California, is slightly easier, with sellers at 8¼c. for yellow and 8¾ for brown.

STAR ANISE is in better demand and firmer, holders asking 18¼c. @ 19c.

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American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

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THE disposition of the alcohol question is a serious matter both to the government and to pharmacy. The Secretary of the Treasury has been favored with consultations innumerable from pharmacists of all degrees and very likely from some of no degree as scientific pharmacists, but who, using alcohol in the manufacture of liquor under the disguise of "bitters" hope to profit by the Hoar Amendment. What the outcome of the situation will be, seems to lie largely in the hands of the Secretary of the Treasury. The question then is, "What will he do with it?"

WELCOME.

The National Wholesale Druggists' Association, which meets at Delmonico's next week, will have laid before them a programme, interesting as regards its business features and delightful as regards its social aspect. To the assemblage we extend the evidences of our most distinguished consideration.

THE INTERSTATE LEAGUE.

AS noted elsewhere in this issue it is proposed by the executive officers of the Interstate Retail Druggists' League to hold a general meeting of the retail druggists of New York City and vicinity co-incident with the annual convention of the National Associations of Wholesale Druggists and Manufacturers.

With a view to arousing enthusiasm in the objects of the proposed meeting and assuring a full attendance, the cities of New York and Brooklyn will be canvassed a week in advance by earnest and capable members of New England branches, who will endeavor to bring home to the druggists of this city and Brooklyn, the advantages of League membership.

The aims and objects of the Interstate Retail Druggists' League are too well known to our readers to require explanation. There is nothing secret or hidden in its proposed method of operating. Its principles of action are succinctly outlined in the agreement made by every retailer who subscribes. The pledge reads:

We hereby agree to withdraw our patronage from any wholesale dealer or jobber who knowingly and willfully furnishes cutters with any merchandise whatsoever. We also agree to discontinue the sale of any patent medicine or proprietary article furnished to cutters by manufacturers or through their agents.

It is not exaggerating the facts to say that the ultimate success of organization among the retail druggists of the country depends almost wholly upon the attendance at the forthcoming

meeting. Further, New York druggists and the fraternity in all large cities may secure for themselves, as a result of the conference with manufacturers, the fulfillment of all that has been promised for years in the matter of regulating prices on proprietary articles. A sense of self-interest, if nothing else, should therefore prompt a ready response to the invitation extended by the officers of the League, to convene in a mass meeting for conference with the makers and wholesale dealers in these articles.

The success of the League in the New England States has exceeded the expectations of all concerned in the work of organizing the druggists of that section. New York is the one State which has lagged conspicuously behind, and it now remains to be seen whether the opportunity presented by the coming meeting will be turned to account. President CANNING certainly deserves every encouragement possible in his efforts to promote the business interests of retail druggists, and it will be cause for lasting reproach if the druggists of New York and Brooklyn fail to respond to his appeal for a large attendance at the meeting to be held in this city on Wednesday, October 3d.

The meeting will be held in the Mott Memorial Hall, 64 Madison avenue, at 8 o'clock P. M., and it is to be hoped that every retail druggist of the cities of New York and Brooklyn, who can, will make it a point to be present.

* * *

SINCE time immemorial have there come wise men out of the east. To New York and Brooklyn this week come four pharmacists of New England who have laid aside their own business for the time to give aid and counsel in the organization in these cities of the Interstate Retail Druggists' League. New England has ever been the starting point for great movements affecting our welfare as a nation.

Here the embattled farmer stood and fired the shot heard 'round the world.

Here took form and substance the anti-slavery movement—may it not be

that our New England brothers are again pioneers in a campaign of emancipation, an emancipation which shall free pharmacy from that most cruel of all forms of slavery, the slavery of poverty!

The altruism which brings these gentlemen here deserves the most enthusiastic recognition on the part of the druggists of the Greater New York, for theirs is the enthusiasm of a righteous cause. They bring with them the prestige of success. New England's organization was effected largely through the efforts of Messrs REEVES, COBB, STILES and CHARLES. Can you druggists of these cities not give their efforts the recognition they deserve?

And after all they but ask you to help yourselves, they appeal to your own self-interests, they are missionaries among you on your own behalf.

PHARMACISTS IN COUNCIL.

THE Asheville meeting of the American Pharmaceutical Association gives promise of excellent results in the action taken by the different sections composing special committees of the National organization.

The report of the proceedings as published in the last issue of THE AMERICAN DRUGGIST furnishes the material for an interesting retrospect of work accomplished, and of the means employed toward diffusing a higher knowledge of pharmaceutical science and elevating the status of the profession generally.

An especially noteworthy feature of this year's meeting consisted of the presidential address. Although he disclaimed any ability as an orator, writer or parliamentarian, Professor PATCH has proved himself a competent performer in each of these roles and it is long since the association has listened to a more eloquent and pleasing address.

In a short reference to the new pharmacopœia which he recognized as a work of the highest value to the general pharmacist both on account of its practical character and advanced teachings, he excused his own brief reference to the work by paying a graceful compliment to the masterly review contained in the address of his predecessor Professor REMINGTON, which our readers will remember was delivered at the opening of the World's Fair meeting in August, 1893.

Something would be wanting were some reference not made to the criticisms of American pharmacy for which the president of the British Pharmaceutical Conference, N. H. MARTIN of

Newcastle, was responsible shortly after the Chicago meeting adjourned. Professor PATCH treats this criticism in a manner which must satisfy American pharmacists that their interests are in safe keeping. In words of rare delicacy he shows that our "interested and critical observer from abroad" has drawn a picture which refers to a non-existent condition, and expended his ammunition upon points in our system of pharmaceutical instruction, etc., which have long been fortified against the attacks of critics.

It will be news to many that the "last fourteen years have witnessed the establishment of twenty-three pharmaceutical journals." This is surely an exaggerated estimate. If not it is to be hoped that Professor PATCH will furnish complete statistics. The enumeration of the many ventures in pharmaceutical journalism will undoubtedly make excellent "copy" and afford interesting reading.

Among the important recommendations contained in the presidential address which if carried out is likely to prove of great value to the members and the profession generally is the use of an "Observation Sheet." A copy of the proposed sheet is printed on page 187 of our last issue.

The well-nigh proverbial tendency of the New Englander toward centralization and the enactment of national laws for the government of the individual is noticeable in Professor PATCH's recommendation regarding the establishment of a national pharmacy commission. He practically advised that the matter of the establishment of a national pharmacy commission and the enactment of a national pharmacy law—securing as far as practicable uniform methods of registration—be referred to the Section on Education and Legislation, with the request that a bill be drafted and presented to the association for discussion at some subsequent meeting, for amendment, and for possible advocacy. But the sentiment of the meeting was opposed to this, and the recommendation failed of consideration.

The recommendation which followed the above, with respect to the drafting by the Section on Education and Legislation of an outline of a course of instruction in pharmacy for teaching colleges to conform to, will appeal favorably to the average teacher, though it is not to be inferred from this that any glaring lack of uniformity prevails among teaching institutions. The adoption of certain specified courses by some colleges would, however, tend to enhance the value of many diplomas.

The proposal to establish an American Pharmaceutical Association scholarship fund of \$1,500 to be awarded annually to suitable candidates did not meet with much consideration. The mode of selecting candidates was deemed impracticable and the whole scheme altogether too visionary for practical purposes. It must, however, be assuring to the advocates of higher pharmaceutical education to witness the introduction of recommendations of this kind. All the signs point to a revival of interest in the creation of endowment funds for the support of graduates who may successfully demonstrate their fitness for taking higher courses in the study of pharmacy.

HOSPITAL SUPPLIES IN SMALL TOWNS.

IN small towns and villages the contracts for drug supplies to local hospitals and charitable institutions are usually awarded to one firm, the one receiving the contract being usually the lowest bidder. They do these things differently in Flushing, L. I., where an excellent arrangement exists among the local druggists for the supply of drugs and sundries to the Flushing Hospital. The town has four druggists and the contract is awarded to all four under the conditions that each druggist will serve the hospital in turn for three months, thus dividing the patronage among all four and providing for a regular quarterly service, which the hospital authorities are assured will be of the best, since each druggist furnishing supplies is put upon his "mettle," so to speak, and makes special efforts to secure the good will of the physicians on the hospital staff. Druggists in other towns similarly situated as to population and local hospitals would find it to their advantage to bring about the introduction of the Flushing method.

THE PHARMACIST AS POET AND AUTHOR.

IN responding to the toast in honor of the A. P. A. at the last meeting of the Connecticut Pharmaceutical Association, Prof. E. L. Patch, President of the American Pharmaceutical Association, adverted to the query contained in our editorial on the "Pharmacist in Literature and Politics" which appeared in THE AMERICAN DRUGGIST of September 21, 1893.

Although he made no reference to modern instances, his remarks are interesting from the connection which he establishes between prominent philosophers and poets and the apothecaries' art.

We give below that portion of his address which touches upon the attainments of the pharmacist as philosopher, poet and author. Professor Patch said:

The question has been publicly asked whether a pharmacist was ever known to honor his country by attainments as a poet, an orator or a statesman.

Any one familiar with our craft, would see in the intense application to petty details, which is essential to conscientious service, the reason for non-development in general lines. An ex-lawyer or ex-physician who acquires distinction in public service obtains reputation for his profession, but putting aside the undeniable fact that the members of these professions have a much higher average of general culture than pharmacists as a class are permitted to reach, the latter leave their calling and their relation to it forgotten.

With professions and vocations as with men we pass without comment the theory that blood tells, and ignoring all achievements of ancestry, we concern ourselves with the quality and character of the individual who to-day stands before us and honor him for what he is and for what he does and not for what his fathers were or did. Yet there have been great men who were ex-pharmacists. Moses, the law giver, must have been trained in pharmacy at the priestly schools of Heliopolis; Aristotle left his home in Stagira to become an apothecary at Athens, but association with Plato fitted him to become tutor of Alexander. Galen was quite as much apothecary as physician. The unfortunate poet Keats was a drug clerk at Edmonton for five years of his too short life.

Geo. Crabbe, the English author, was a druggist. Louis Desire Veron, the French author and journalist, began life as a pharmacist. Karl Wilhelm Scheele, the Swedish discoverer of manganese, chlorine barium, oxygen, prussic acid, etc., lived and died a pharmacist. Serturmer, who by the discovery of morphine revolutionized the practice of medicine, was an apothecary.

Sir Humphrey Davy was an apothecary's apprentice to M. Borlase, at Penzance, England, but the chance reading of "Elements of Chemistry" by the martyr French chemist, Lavoisier, led him into his broader career.

Did any of you who visited the marvelous White City and were attracted by the remarkable exhibition made by the Baltimore and Ohio R. R., showing the evolution of the locomotive, realize that the world was largely indebted to an apothecary of Baltimore, Wm. Morris, for the first practical six-wheeled locomotive, capable of climbing an incline? That the achievements of his locomotives "Washington" and "Lafayette" at the Columbia Incline, Philadelphia, and the "Philadelphia" at the Lickey Incline, England, led to the establishment of the Royal works at Vienna under his direction.

And as you looked over that exhibition were you not impressed as never before that nearly all advance is by very short successive steps, the present building upon the past?

THE PASSING OF THE APPRENTICE.

THE apprentice is of the old order of things that pass. He is gone, save in a few retired nooks where the current of Time is felt only as a gentle eddy and in his place we have a youth whose only tie to his employer is his weekly salary, whose only recompense is a small monetary consideration, and whose stay is as uncertain and frequently as unsatisfactory as an April day.

No longer do we find the careful parents confiding their son to the keeping of some pharmacist of high moral character and business reputation in the pleased consciousness that his training as a pharmacist, as a man and as a merchant will be looked after ably and conscientiously. We find instead a gay and gallus youth, cigarette in mouth and cane in hand, seeking for what he terms "a snap," where he will receive the largest amount of money for the performance of the smallest amount of work, and in his search for this sinecure drifting from one store to the other at the rate of half a dozen per annum.

Here, after all, lies the opportunity and the despair of the pharmaceutical pedagogue. Here is where the greatest labor is required and where the most wide reaching and satisfactory results are to be looked for. The beginners in pharmacy of to-day are the determining factors in the status of pharmacy tomorrow. If we are to have broad-minded pharmacists we must begin with well-educated apprentices.

Notwithstanding the passing away of the system of formal apprenticeship with its almost unlimited opportunities for good, and it must be admitted, for evil, the legislatures of the various States, following the lead of the colleges of pharmacy, have practically prescribed a period of virtual apprenticeship in requiring stated amounts of experience as a pre-requisite for registration. This however does not prove an adequate substitute for the old-fashioned system of apprenticeship. The features of value in that system were the care exercised in the choice of an apprentice, the responsibility placed upon the master which converted him into a teacher, and the responsibility to the master imposed on the apprentice which made him a good pupil.

The relation of teacher and pupil it would be difficult to reinstate. This must depend upon the persons directly interested, and however much we may preach of the pedagogic responsibility of the pharmacist to his clerks, we must

after all depend here solely upon precept.

In the matter of the selection of the material from which our future pharmacists are to be drawn, however, Professor OSCAR OLDBERG has pointed out in a paper read at the recent meeting of the American Pharmaceutical Association and presented on page 228 of this issue that the state boards of pharmacy as a rule have power to adopt and enforce such regulations as they see fit for the proper enforcement of the pharmacy laws. Under this head he argues it would be within the province of the State boards to inaugurate a system of registration of apprentices that would protect pharmacy from being overrun with apprentices so illiterate as to be a disgrace to the profession. According to Professor OLDBERG's plan, whenever a young man goes into a drug store he should at once report his name to the State board, together with proper evidence of sufficient preliminary education, and his employer should certify to the fact that the young man has actually entered upon a *bona fide* engagement in the store to learn the business. The apprentice should be required further to report any changes from one store to another, and such other precautions should be taken as would insure a complete and correct record of his whole period of "practical experience." The penalty for any false return should be a forfeiture of the credit for all or a part of the apprenticeship period, or of the right of registration, or the forfeiture of a license already issued, if fraud be discovered after the licensing. Any registered apprentice, registered assistant pharmacist, or registered pharmacist whose name and record of active service may be found upon the books of the board of pharmacy should continue in the enjoyment of his privileges as long as he observes the law, and should be liable to forfeit them if he wilfully violates it.

As pointed out by the author the practicability of this plan has been demonstrated by actual experiment in the provinces of Ontario and Quebec in Canada and in Victoria and Queensland in Australia, where the conditions of the drug business are the same as in our own country.

A BROOKLYN pharmacist has made a genuine discovery in the art of handling the bold, bad burglar. Ammonia dashed in his face seems to be as effective as bullets in putting the midnight marauder to flight. The bicyclist has long used a little ammonia pocket syringe, called the Ki-Yi, in dealing with the vicious dog of the rural roadside.

Written for

The American Druggist and Pharmaceutical Record

LET THE DEALER TAKE HEED—LET THE BUYER BEWARE.

BY AN APOTHECARY.

Our trade has long contended with a disturbed condition of affairs. But fortunately the cause affected one class of preparations chiefly—the proprietaries, or patent medicines. In this, after all, no ethics were involved, and it may be viewed at this somewhat remote day as the solution of a commercial problem. These proprietaries, although composed of, and called by the name of medicines, had no authoritative creation and the prices were as arbitrary as the whims which originated them. They were exploited as business ventures and took the chance of success. The public at large never had more than an ephemeral interest in them, and the medical profession no affiliation.

The so-called process of "cutting" or underselling ultimately did extend to other articles, but had not entered the inner domain of pharmacy, the extempore prescription—the official preparation—the galenical compound—except casually and in a limited way.

But now a new evil seems to threaten, which is not merely of interest in a business aspect, but serious in that it will derange established methods, and may prove a menace to health and life. The manufacturers of pharmaceutical preparations have entered the arena of a baleful competition, and now offer products at prices which cannot be above the cost of material without computing the cost of labor and production! Such procedure promises to supply the physician who may furnish the medicines he prescribes, at such merely nominal rates that it will indeed prove a tempting inducement to this class of practitioners, to wholly ignore the retail apothecary!

It will tend to divest the prescription department of another of its vestiges. It is observable too, that the vehemence of this competitive suicide stops at no inconsistency, but runs the length of quoting compounds at a less price than the ingredients are offered singly, on the same list! Is there no expense of production—no cost of manufacture? Is this likely to be prompted by any benevolent design—any purely humane motive? Is it not rather the act of a blinded malice which strikes at a foe and wounds a friend. Is it likely that the purity and integrity of medicine is to be all the while scrupulously upheld? Will there be no temptation to tamper with quality to maintain a profit? Then in this crash and strife, what is to be the fate of the sick? Where the possibility of life may rest on the curative power of medicine—how can we reconcile these things—these acts.—Are medicines which are the creation of art, the result of skill, guarded with zealous care by expert knowledge, to be hawked about at a bargain-counter-price? What can so completely destroy confidence as the creation of a doubt as to the purity of medicine? What threatens purity more certainly than an inadequate com-

pensation in price and value? Can the apothecary consent to have the remnant of his business by this means dragged down by a useless and pernicious competition into the mire?

The authors of such species of rivalry seek to discredit certain classes of preparations. For instance, one blow is aimed, we observe, at tablet triturates. After a vain attempt to produce these, the effort is made to break down that which there has been an inability to build up, though others with more signal purpose and enterprise have been eminently successful. To accomplish the intent, the retail druggist is harangued and counselled to resent imaginary imputations against his business character. By similar means it is sought to throw discredit upon products by maligning the character and motives of those who represent them, thus fomenting discord and widening a breach which time and a generous feeling had partially healed.

The trade, in both its branches, should oppose such methods, such anomalous business practice, with vehement protest and action. The underselling at profitless prices has forced reputable goods into irresponsible and miscellaneous hands. The dignity and character of distinctive business has greatly suffered thereby. The retail trade should not be deluded into accord by a false light. A marginal profit, such as is offered under a plausible promise of diverting orders of physicians to the hands of the dispenser is wholly inadequate to maintain the expense of business, the total of salaries, rentals and incidentals far exceeding such meagre basis of gain.

Let the dealer, then, take heed lest, in the sharpness of a destructive competition, he is not compromised in the quality of that for which he must stand sponsor. And let the buyer beware lest he carry not to the bed of illness a harmful, hurtful thing in lieu of a healing, curative balm. Our medicine, and our food, should assuredly be far removed from the strife of a dangerous competition, and the reckless cheapening of either, or both, is one step towards a direct assault upon health and life.

Written for

The American Druggist and Pharmaceutical Record.

PRACTICAL FORMULAS.

The following formulas are submitted by a reader who conceals his identity under the pseudonym "Laboratoria." Formulas of this kind are useful because of their practical character and we are pleased to give them space in our columns.

BEEF, IRON AND WINE.

This is a preparation which druggists do not take enough interest in. Instead of manufacturing it themselves they give way to the manufacturer, and in consequence their shelves are stocked with preparations whose real composition is known only to the latter. Below is a formula which is simple to make, and which will compare favorably with any on the market:

Extract beef.....	3 ii
Citrate iron and ammonium.....	3 i ss
Oil orange.....	3 ss
Sugar.....	3 x
Cherry wine.....	Cong i

The National Formulary publishes a formula for the above preparation, still, I think that the formula given here is preferable.

TOOTHACHE DROPS.

Oil cloves
Oil cassia
Chloroform
Creosote ss equal parts

The above is an excellent formula for this class of preparation.

COUGH MIXTURE.

Druggists will find this formula equal to, or superior to any secret article in the market.

Tinct. opii camph.....	3 iv
Syr. acille ss.....	3 iii
Tinct. acetæ racemose.....	3 iii
Tinct. sanguinaria.....	3 i
Tinct. benzoini ss.....	3 i
Syr. ipecac.....	3 ii
Syr. tolu.....	3 xvi

Dose. One-half to one teaspoonful, according to age.

PECTORAL ELIXIR.

Pulv. liquorice.....	3 ss
Pulv. acacie.....	3 iv
Tinct. opii camph.....	3 ii
Vin antimonii.....	3 ii
Spts. ether nit.....	3 ii
Aque.....	3 iv
F. E. cherry bark.....	3 i
Elixir aromatic, ad.....	3 xvi

Rub the liquorice and pulv. acacia with the water, add gradually the other ingredients, and filter through absorbent cotton.

NEUTRALIZING CORDIAL.

Fl. ext. rhubarb.....	3 iv
Fl. ext. cinnamon.....	3 ii
Potass. carb.....	3 ii
Aque.....	3 i
Sodii bi carb.....	3 i
Ess. menth v.....	3 ii
Syrup ad.....	3 ii

RHUBARB AND SODA MIXTURE.

Sodii carb. (pure crystals).....	3 i
Ol. spearmint.....	3 m xv
Syr. rhubarb arom.....	3 ii

The carbonate salt is to be preferred to the bicarbonate as it forms a perfectly clear mixture, while with the latter a sediments forms on standing.

LINIMENTS.

The market is flooded with this class of preparations, but pharmacists who desire to sell their own will find the following formulas valuable:

MAGNETIC LINIMENT.

Spts. camphor.....	3 ii
Alcohol.....	3 ii
Tr. capsici.....	3 ii
Aqua ammonia.....	3 ii
Oil turpentine.....	3 ip
Oil sassafras.....	gts x
Oil gaultheria.....	gts x

RHEUMATIC LINIMENT.

Oil sassafras.....	ss ii
Oil gaultheria.....	ss ii
Aqua ammonia.....	3 iii

LINIMENT FOR SPRAINS, ETC.

Lin. saponis.....	ss i
Ext. witch hazel.....	ss i
Tinct. aconite.....	ss i
Tinct. arnica.....	ss p
Chloroform.....	3 i

TOILET CREAMS.

Many formulas are in vogue for this class of preparations, and about this season of the year the sale is gradually increasing. The formula published in the AMERICAN DRUGGIST of Aug. 10, page 103, will be found an excellent one. The following is similar to a popular proprietary preparation.

EMOLLIENT CREAM.

Quince seed.....	3 ss
Borax, P.....	3 i
Glycerine.....	3 iii
Cologne.....	3 ii
Hot water.....	3 xii

Crush the quince seed and macerate with the hot water for one hour, stirring occasionally, then strain through muslin without pressure; add the borax and glycerine, and add the cologne.

WITCH HAZEL CREAM.

White vaseline.....	13 1/2 oz.
Yellow wax.....	8 1/2 oz.
Spermaceti.....	8 1/2 oz.
Witch hazel.....	3 1/2 oz.
Perfume.....	1/2 oz.

Melt the first three ingredients together; then add the witch hazel and stir. When nearly cold add the perfume and stir well.



To Make Wood Uninflammable.—R. Stubling states (*Bayerische Ind. und Gewerb. Bl.*) that inflammability of wood is much decreased by treating it under pressure with a 6 per cent. solution of potassa or a 4 per cent. solution of soda.

Oenoglucose is a new grape sugar prepared in France, which is of a high degree of purity that is comparatively free from intermediate dextrin-like products. It is proposed that oenoglucose be used in the fortification and in the artificial production of wines.

Ingestol is the name given a remedy, being introduced by a Berlin firm which they recommend in acute and chronic complaints of the stomach and intestines and in sea sickness. It is a slightly opalescent, light citron yellow aqueous solution which is said by the manufacturers to contain the sulphates of magnesium, sodium and potassium, sodium chloride, alcohol, ether and iron.

Tussol, an Antispasmodic.—Tussol is the name applied to antipyrine amygdalate, which Dr. Renn in the *Pharmaceutische Post* states he has employed in a number of cases of pertussis. His experience results briefly, in the following conclusions: Tussol favorably influences the complex of symptoms in whooping cough,—rapidly diminishing the frequency of attacks and mitigating their intensity; its action decidedly exceeds that of simple antipyrine. No untoward by-effects have been noticed.

Tannigenum is the name given to acetyl tannin, which has been recommended as a remedy in diarrhoea. It appears in the form of a yellowish gray, odorless and tasteless powder. It is not appreciably soluble in water or in dilute acids, but is easily soluble in alkalis and thus passes through the stomach and don't exercise its astringent action until the bowels had been reached. The dose given so far is 0.2 to 0.5 gramme (3 to 8 grains) three times a day, although daily doses amounting to 3 or 4 grammes have been given without producing any disagreeable results.

Liquor Anthracis is the title given a new preparation of tar resembling the liquor carbonis detergens of English pharmacy. This German preparation is in two forms, a simple and a compound. According to Fischel the process consists in bringing coal tar into solution by a peculiar process and adding sulphur, resorcin, salicylic acid, to make the compound liquor. The simple liquid is merely a solution of tar. The preparation is a thin liquid which can be spread with a camel's hair pencil.

Sulphide of Calcium as a Depilatory.—Dr. Annequin, a French military surgeon, recommends a depilatory before operations in regions where shaving is difficult, such as the scrotum or anus, the use of sulphide of calcium, made into a paste with water and applied to the hairy surface. This removes the hair completely in less than ten minutes without causing any irritation of the skin or injuring the hair follicles. The sulphide of barium may similarly be used mixed with half its weight of starch powder and the same quantity of oxide of zinc. This is made into a paste by the addition of water and is applied to the part.

Mercurialized Traumaticine.—Traumaticine, a 10 per cent. solution of gutta-percha in chloroform, has been employed by an Italian physician as a convenient vehicle for the cutaneous administration of mercury in syphilis. He adds to it a quarter of its weight of calomel, and after the patient has had a bath the syphilitic patches, if there are any, are painted over with the liquid. If there are none the back is painted all over, and when the chloroform has evaporated the skin is left coated with a mercurial varnish which adheres closely. This treatment is repeated three times a week until the specific symptoms have disappeared. In papular, pustular, and squamous syphilides a successful result may be expected in from three weeks to a month.

Effect of Iodide of Potassium on the Blood.—According to Dr. T. V. Ishunin, of St. Petersburg, who has examined

the blood of fifteen patients and four healthy persons before and after taking iodide of potassium, the effect of quantities of this drug ranging from fifteen to thirty grains per diem on non-syphilitic patients and on healthy subjects is, during the first two or three days of its administration, to increase the number of young corpuscles and to diminish the number of over-mature white corpuscles in the blood, and at the same time to increase the number of those breaking up. As to the total number of corpuscles per cubic millimetre, the effect of the iodide appears to be to cause an increase, but a slight one. When the iodide is given to syphilitic persons the over-mature elements increase in number and the immature white corpuscles and those which are breaking up decrease.

Prepared Catgut.—Catgut intended for surgical use, is best sterilized, according to Dr. Répin (*Ann. de l'Inst. Pasteur*), by the vapor of superheated alcohol, as follows: All grease is first removed by the solvent action of ether or carbon disulphide, and the catgut is then dried in a hot-air chamber, the temperature being gradually increased to 110° C. (230 F.). To avoid re-absorption of water, the catgut should next be sterilized without delay, by being placed, together with a little absolute alcohol, in a glass tube or metallic cylinder, hermetically closed and heated in an autoclave to 120° C. (248 F.), for an hour. If desired, the catgut may be passed through a solution of chromic acid, after removing the grease and before desiccation; but this is not considered essential, since the product is perfectly satisfactory without this treatment.

Anti-toxic Effect of Salamander's Blood.—It is known that the salamander is but little affected by curare, the reason being, according to some observations communicated to the Société de Biologie, Paris, by M. Phisalix, that there is in this animal's blood some anti-toxic substance. He found that a mixture of the defibrinated blood of the salamander, with a considerable quantity of curare, was inert when introduced into the system of a frog. He believes that this anti-toxic effect was due to some vital principle rather than to a mere chemical antidote, for frogs into whose peritoneal cavities salamander's blood had been injected remained for a long time incapable of being acted upon by curare. These facts appear to afford some explanation of the tolerance of the toad, salamander, and some other animals to the poison of the reptiles which is more or less similar in its effects to curare.

Podophyllotoxin.—Spindler (*Lancet*, 1894; II; p. 212). According to Dr. V. Podwissotsky, who has made a careful and exhaustive examination of podophyllum (both root and resin), Podophyllotoxin is the natural combination of picropodophyllin, with an inactive resin acid existing in may-apple root. It is a yellowish white, resinous powder, of a very bitter taste and a faintly acid reaction; soluble in alcohol and in hot water, only sparingly soluble in cold water.

Dr. Spindler of Dorpat has recently experimented with podophyllotoxin, and finds that in small doses it is an excellent laxative. He prescribes $\frac{1}{4}$ grain (1 cgr.) in alcoholic solution, which usually results in a normal stool. Sometimes, indeed, a single dose will cause a habitually constipated patient to go to stool regularly every day for a week or more. One great advantage claimed for podophyllotoxin over most other laxatives is, that it does not bind the bowels afterward.

Bismuth Pyrogallate is an amorphous, odorless and tasteless yellowish-green powder insoluble in water and in alcohol, very slightly soluble in 0.3 per cent. solution of hydrochloric acid, from which it follows that it is but slightly decomposed by the liquors of the stomach. On the other hand it is readily soluble in less dilute acids, sulphuric acid being excepted. These decompose the salt into pyrogallol and the bismuth salt of the acid used. The solution in concentrated nitric acid is precipitated by the addition of an excess of potassium carbonate which is not the case with a solution in hydrochloric acid. The following process is recommended by V. Veltorio (*Bollitino Chim. Farm.*) for its preparation: Mix 2 parts of bismuth carbonate and 1 part of pyrogallol in a porcelain capsule, stir in so much water that a thin paste is formed and warm until the evolution of carbon dioxide ceases. The mass swells up under this treatment and gradually changes from white to a lemon-yellow color. Then place the mass on a filter and wash until the filtrate ceases to give a violet color with lime water and finally dry at 50° C. So made the preparation contains 60.1 per cent. of metallic bismuth. The author states that bismuth pyrogallate is non-toxic, that it is decomposed in small quantities only in the organism, bismuth but no pyrogallol appearing in the urine and that it promises to be of much value in infectious intestinal diseases.

To Remove Rust Stains from Linen.

A. Schneider attributes *Pharm (Centralhalle)* the difficulty of removing iron stains to the formation of an insoluble iron soap by a double decomposition between the soap used in washing and the iron salt which makes the stain. The reactions observed support this theory. The author commends the following methods of procedure.

The methods are designed with especial reference to removing the stains left by the iron baths furnished by "Moor" bathing salt such as is referred to on page 95 of volume XXV of this journal.

PROCESS NO. 1.

Moisten the linen, apply on the stained places an aqueous 5 per cent. solution of tannin and lay aside for six hours. Then rinse in clear water, wash with soap and again rinse in plain water. Now apply on the spots a 5 per cent. solution of oxalic acid, lay aside for six hours and then rinse in clear water.

PROCESS NO. 2.

Rub into the stained places of the pre-

viously wetted linen a 1 per cent. aqueous solution of potassium sulphide, lay aside for six hours, rinse in clear water, wash with soap and again rinse in clear water. Now apply diluted acetic acid to the black spots, allow to stand for six hours and then rinse with clear water.

Extracts from the Sixth Edition of Diesterich's Pharmaceutical Manual.*

(Continued from page 142.)

Veterinary Remedies.

Scab.

Scab is most apt to affect old or ill-fed horses and generally appears on the side of the neck, on the shoulder, the back, the hips, at the root of the tail and on the feet. Without going into a discussion of the different kinds of disease germs I will give briefly the treatment, and the popular washes, etc., used.

In all cases the first thing to be done is to wash the affected parts with a warm solution of green soap (medicinal soft soap). The animal must also be separated from the others and special care taken in feeding and grooming it.

TOPICAL APPLICATIONS FOR SCAB.

	Parts.
A.—Wood tar.....	500
Green soap.....	250
Alcohol, 90 per cent.....	150
Flowers of sulphur.....	100

Mix with the aid of a gentle heat. Wash the affected parts with warm soap and water, dry with a cloth and spread this salve on with a brush; repeating the application in eight days. As a rule two applications suffice. The salve or paint eventually falls off of itself.

	Parts.
B.—Creosote.....	50
Green soap.....	100
Alcohol, 90 per cent.....	50

Mix and apply to the affected parts after washing and drying them.

WASH FOR SCAB.

	Parts.
Potassium sulphide.....	50
Green soap.....	100
Water.....	840
Oil of turpentine.....	10

Dissolve the soap and the sulphide in the water by the aid of heat, and then add the oil of turpentine.

Wash the affected spots with a weak soda solution, dry with a cloth, and then moisten with the above wash. Repeat this twice each day.

SALVE FOR FOOT SCAB.

	Parts.
Mercurial ointment.....	60
Salicylic acid.....	10
Lard.....	130

Wash the affected parts with a solution of green soap; dry, and apply the above salve once each day.

Rhachitis.

	Parts.
Precipitated chalk.....	100
Calcium phosphate.....	100
Potassium bicarbonate.....	50
Fennel, in No. 20 powder.....	50

Mix, and give one tablespoonful with each meal.

Rheumatism and Rheumatic Inflammation of the Feet.—Founder.

A. ELECTUARY.

	Gm.	Drachm.
Camphor, powdered.....	7.5	1 $\frac{3}{4}$
Potassium nitrate.....	60.0	15
Sodium sulphate, granular.....	140.0	60
Juniper berries, crushed.....	120.0	30
Rye flour.....	100	25
Water, a sufficient quantity.		

Make into an electuary and give one-fourth of the whole every five hours.

B. IN PRESENCE OF FEVER.

	Gm.	Drachms.
Powdered aloes.....	30	7 $\frac{1}{2}$
Sodium sulphate, granular.....	240	60
Rye flour.....	100	25
Water, a sufficient quantity.		

Make into an electuary, divide into two parts and give three hours apart.

C. IN FEVER.

	Grammes.
Benzoic acid.....	100
Sodium sulphate, granular.....	50
Rye flour.....	100
Water, a sufficient quantity.	

Make into an electuary and give one-quarter of the whole every twelve hours.

A. LINIMENT.

	Parts.
Spirit of camphor.....	250
Tincture of capsicum.....	30
Oil of turpentine.....	20

Rub on the lame foot three times a day.

B. IN RHEUMATISM OF THE SHOULDER.

	Parts.
Volatile liniment.....	250
Oil of turpentine.....	50

Rub in well three times a day.

(To be continued.)

ARISTOL SALVE FOR BURNS.

	Parts.
Aristol.....	10
Olive oil.....	30
Petrolatum.....	40
Anhydrous lanolin.....	40

TOOTH POWDER FOR USE AFTER TAKING IRON.

	Parts.
Borax.....	20
Potassium chlorate.....	10

TRANSPARENT GLUE FOR PORCELAIN.

[*Sudd. Apoth. Zeit.*]

	Parts.
Rubber, cut fine.....	75
Chloroform.....	60
Mastic.....	15

Dissolve the rubber in the chloroform, then add the mastic and allow to stand until solution is effected.

The Treatment of Tape Worm.

Dr. Leslie Ogilvie (London *Lancet*) attributes the frequent failures in the attempt to remove a tape-worm to a lack of attention to details in the administration of the drug used. When the purgative is given soon after the anthelmintic the worm is carried away all but the head. In such cases it is useless to repeat the drug, as is frequently done, in a short time, as the worm offers but scanty absorbing surface and the chief effect of the drug is to poison the patient. Neither does he consider castor oil a suitable purgative to give before the administration of the anthelmintic as there is in all probability a considerable coating of mucus about the worm which the oil does not remove. Sulphate of magnesia with tincture of jalap he considers the most efficacious preliminary purgative.

* Translated for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

He conducts his case as follows and reports thirteen consecutive cases successfully treated, ten of which had been previously treated without result:

The patient should eat less than usual for a few days before treatment, and the day before should be restricted to a milk diet with a little stimulant. At bedtime a purgative draught of sulphate of magnesia and tincture of jalap is given, and repeated at seven the next morning if the first dose has not operated. At eight A.M. a drachm of fluid extract of male fern is given, and at nine o'clock a second dose. At eleven

o'clock a dose of castor oil is administered; even if the worm has been passed previously, it is well to remove any of the poison which may be left.

The physician should pay a visit soon after the second dose of male fern has been given, not only to observe the patient, but to inspect all the motions, each one of which should be passed into a separate utensil. In searching for the head it is convenient and less unpleasant to use a dilute solution of permanganate of potash as a disinfectant with which to separate the worm from the feces.

AMERICAN PHARMACEUTICAL ASSOCIATION.

BELOW are grouped a further selection from the papers presented at the Asheville meeting of the American Pharmaceutical Association, a full account of which appeared in our last issue.

Patent Laws and Medicine.

By W. BODEMAN,

Chicago, Ill.

The American Pharmaceutical Association should appoint an Agitation Committee, for the express purpose of asking every member and all pharmaceutical state and local societies to see that our trade mark and patent laws are changed. The American Pharmaceutical Association has been asked to do this repeatedly—but has never done a thing; so the most appropriate answer to this query would be—get a move on yourself and do something.*

It is well enough to patent a process of manufacture, but the manufactured article should never be patented.

No European country grants a patent on a manufactured article used in healing arts. Take sulfonal; there are about a dozen different patents on the process of manufacture of this chemical in Germany, but the article itself is not patented, and the result is that chemists never tire of discovering new ways of manufacturing such chemicals, and that opens the field of competition. Our country, however, bars the field of investigation by patenting the process, the article itself, and the name; and in this way you must pay, and do pay, exorbitant prices. If this sort of "hold up and pay" policy is not modified, our materia medica will soon be completely chained up by trade mark and patent laws. Enough has been said on this subject to make it clear to every member that something must be done, or in due course of events pharmacists and pharmacy will soon be owned by a small army of patentees and sole lessees.

If the American Pharmaceutical Association does not act on such urgent appeals as have been laid before its conventions, it would be a waste of words to try further to stimulate the association into action. A committee should draft an appeal to every pharmacist in the United States, urging each and every one to exert himself with his representative at Washington to have these monstrous laws changed. The committee should request every asso-

ciation in the land to take up the fight—and I would make a formal motion, to have a special committee appointed that has authority and power to act, to agitate this question till these infamous laws are changed and so modified as to open up the field of investigation to competition, and cheapen the price of chemicals applied in the healing art. I leave this motion in the hands of the able chairman of the section on Legislation.

ANOTHER LESSON FROM THE GERMANS.

If the great superiority of German chemical science, theoretical and industrial, must be freely conceded, it is not less true that Germany has arrived at happy solutions of many practical pharmaceutical problems with which we are still wrestling. In no way is this fact more strikingly exemplified than in the German laws for the regulation of patents on new chemicals and medicaments.

No one needs to be told of the impositions which are practiced in this country under the protection of our absurd statutes with respect to patents. As long ago as May, 1891, the *Therapeutic Gazette* declared:

"The majority of medicinal patents have no real merit. Most of them represent absolutely nothing that was not previously known to science; they are nuisances; they do not contribute to general intellectual progress; they discourage scientific investigations. The only explanation that can be given of this lamentable state of affairs lies in the laxity and ambiguity of the present patent laws, and the almost puerile knowledge which they manifest regarding the history of chemistry in its broadest sense. A medicinal preparation need not represent anything novel further than the new name."

The German patent laws are not quite so pliable and accommodating to ingenious gentlemen seeking new means of making money out of old ideas. We have before us a compilation of all the Imperial statutes relating to the protection of intellectual property,* and are struck with the explicit manner in which, on page 133, "nutrients and medicaments are excluded from patent protection, and made the common property of the public, save in so far

as the alleged invention involves a new and definite process of manufacture." Thus, sulfonal, for example, enjoys patent protection in Germany, but not in the ironclad, monopolistic and exclusive manner which prevails in our American patent regime. The German patent covers only the process of producing a therapeutic agent—not the substance itself. Sulfonal is manufactured in Germany by a number of competing factories, each operating under special patent on the process employed. This happy exemption of the substance itself has stimulated investigation, has improved and multiplied the modes of production, and has, moreover, reduced the selling rate to a mere fraction of the original price.

The anomaly of the whole patent business, as we see it in America, becomes almost humorous when we observe further that the German inventor, while content with such protection as the law gives him at home, is yet very careful to take advantage of our absurd legislation, and to patent the *product* itself in America, thus excluding competition and creating a monopoly as stringent as an unwise law can possibly engender. It need not be added that such products are marketed at excessive rates, and the consumer pays more than handsomely for the foreigner's protection. We Americans are fond of calling ourselves a practical people, and we plume ourselves not a little on our wide-awake shrewdness; but the manner in which we permit foreign chemical manufacturers to exploit us shows plainly that cleverness is not the exclusive property of our legislative Solons.

The whole fabric of patent protection in medicine and pharmacy is one which we have always regarded with unconcealed disfavor: we hold that its tendency is mischievous to science. Yet it is idle to deny the utility—nay, the positive value—of many protected agents, especially among the synthetical remedies. They have indisputably enriched medicine in numerous instances, and physicians will persist in their use—not without warrant. The path of wisdom would accordingly seem to lie, not in the exclusion of new inventions fraught with rich benefit to medicine, but rather in doing away with the custom of patenting the substance itself.

The invention of a process for producing a new remedial agent—a definite chemical compound—with properties superior to those of other known products, is often the fruit of prolonged research by a competent student; reflects high credit on the inventor; and should of right yield him such profit as may accrue from the protection of his process by patent.* If such chemical is valuable in the treatment of disease other investigators will be stimulated

* Let no one, however, fail to note how difference the case stands with the many compounds which represent solely the favorite prescription of some physician, or the mere mixture of familiar drugs. What scientific education or long study is here required? Every tyro in medicine or pharmacy may launch such remedies on the market by the score, and their manufacture certainly merits no protection. It is, indeed, true that the majority of such compounds or mixtures are not patented. In these instances, however, the proprietor can afford to dispense with protection of the formula, since the trade-marked or copyrighted name renders the product virtually the undivided possession of its exploiter.

* "Die Reichsgesetze zum Schutze des gewerblichen geistigen Eigentums." Mit Einleitung und Erläuterungen von C. Davidsohn, Oscar Beck, Munich, 1892.

[See also "Patent Medicines in Germany." Page 333—Ed. AMERICAN DRUGGIST.]

to discover new means of effecting the same purpose—the manufacture of the article—by a different process in turn deserving of patent, and so forth. A healthy competition is thus created, which increases the number of methods and reduces the cost to the consumer.

Can a Minimum Standard of Pharmaceutical Education be Adopted?

In answer to Query No. 3 by the Committee.

By PROF OSCAR OLDBERG.

Chicago, Ill.

More or less definite compulsory courses of pharmaceutical education are established in most of the civilized countries of the world. England and the United States are the notable exceptions. The chief reason why pharmaceutical education has not been made compulsory through the enactment of direct special laws in England and America, is evidently to be found in the fact that in these two countries there is unlimited competition in the retail drug business, while in the other countries the competition is limited. Nevertheless England and America have sought to accomplish at least *something* in the same direction by indirect means. Instead of declaring that every person who is granted a license to practice pharmacy must first have completed a certain course of studies in a pharmaceutical school, the pharmacy laws of England and America simply require that the applicant for such license shall pass an examination conducted by the official pharmaceutical examiners representing the State.

COMPULSORY EDUCATION ABROAD.

But compulsory pharmaceutical college training has recently been established even in Ontario and Quebec, Canada, and in Victoria and Queensland, Australia, in which countries the retail drug business is carried on in the same way as in America. Therefore it ought to be practicable to adopt compulsory standards of pharmaceutical college training in this country, too. This can, of course, be done only by legislation. That such legislation will surely be undertaken, sooner or later, we may know from the steady progress of pharmaceutical legislation in all lands. We can hope for *wise* laws if the whole subject in all its bearings be carefully considered by competent, conservative, broad-minded men, uninfluenced by personal prejudices, and a definite plan agreed upon by them to serve as a basis for these laws. I for one, feel hopeful that this can be accomplished.

Before any laws shall be enacted to establish compulsory pharmaceutical education, it would seem to be highly desirable that a body of thoroughly representative men should give this question their most deliberate and earnest consideration, and formulate an authoritative declaration as to what should constitute a minimum course of pharmaceutical education; or, if these men should conclude that more than one class of pharmacists ought to be recognized, each with its own standard of minimum requirements as to educa-

tion, then these respective standards should be formulated.

A COMMISSION TO CONSIDER THE QUESTION.

This body might consist of delegates or members elected or appointed by the American Pharmaceutical Association, the Boards of Pharmacy of the respective States, and the several pharmaceutical schools or colleges. Ample sufficient time should be taken to give due attention and thought to the question. If one year is not found sufficient, let two years be devoted to it.

It should be the duty of that body not to attempt simply to equalize or harmonize the different standards or courses now given in existing pharmaceutical schools and colleges, nor to effect any compromises between them. A body or commission constituted in any such manner as here suggested could have no power to compel any college or school to adopt its conclusions, any more than this association could establish uniformity in the methods and educational standards of the several colleges. On the contrary, the commission, should one be constituted, must, in order that its conclusions may command respect, avoid being unduly influenced by the methods or standards of any of the existing schools. It should, instead, think out and formulate, *ab initio*, such a plan and such standards as may seem to a majority of its members to be wise and practicable, and to best subserve the interests of the people, the medical profession, and true pharmacy, wholly regardless of the present or prospective practices, plans or interests of any teaching pharmaceutical institution or institutions, and without any thought of trying to coerce any such institution into any degree of conformity to the conclusions which the commission may reach.

INDEPENDENT CONCLUSIONS DESIRED.

The conclusions formulated by the commission may not closely resemble the requirements or practice of any one of the existing pharmaceutical schools. Indeed, the differences between different institutions are so considerable that the independent views of the commission would probably not conform to those of any one of them. But if the conclusions of such a commission bear evidence of intelligent fidelity to the true interests and dignity of pharmacy, if they have the stamp of wisdom, justice and independent thought, and if they be practical, their moral weight will accomplish more for the recognition, spread and further advancement of sound pharmaceutical education than any compromise or rivalry between the colleges, or any vote or resolution passed by any association.

No standard of pharmaceutical education can be of any value unless sufficiently well defined to insure a reasonably close approach to uniformity of interpretation. Nevertheless, any unnecessary details should be avoided in its formulation.

Upon the invitation of the officers of this section of the association, I submit herewith some facts and questions which seem to me to require very careful consideration in this connection:

QUESTIONS FOR CONSIDERATION.

1. What should be the minimum of preliminary education required of all who shall enter upon their apprenticeship in pharmacy, or who shall be admitted to a college or school of pharmacy?

2. Should there be but one class of college-trained pharmacists, and if so what should be the minimum of special education required? If more than one class of college-educated pharmacists be deemed necessary, what should be the minimum course of special education of each class?

3. Should not the minimum standards recommended be such as can be made compulsory by law in the near future?

4. What courses of study ought to be included in the obligatory curriculum, and how wide should be the field of study in each distinct subject?

The answer to this question must, of course, depend upon: (a) the number of months devoted to the entire course of education; (b) the number of hours' instruction and text-book study from day to day; (c) the preparatory education demanded of students; (d) whether the course is intended to be eventually made obligatory upon every pharmacist, or only upon those who voluntarily attend colleges of pharmacy; (e) whether the students devote their whole time to their school work or divide time between the college and the shop; and (f) what is practicable in view of the actual condition of the practice of pharmacy and those engaged in it.

5. How many months or weeks should be devoted to the entire course of special college education?

The answer to this question must necessarily be governed by the very important circumstance whether or not the student gives his whole time and attention to his studies and is well occupied; and if the student's time is divided between his studies and everyday shop employment, then the question must be: What proportion of his time is really devoted to his school work?

A "three years' course" with but five months' work each year would be a very different thing from a "three years' course" with nine months' work each year: six months' work, with the student's entire time and attention devoted to his studies, is a very different thing from six months divided between study and wage-earning; ten hours' instruction weekly for a month is not to be compared to thirty hours' instruction weekly of the same kind during the same length of time; and a course consisting of lectures only is entirely different from a course including also laboratory practice.

It is, therefore, self-evident that the value of a course of education is not to be measured by the number of calendar months through which it extends; but that many other and much more important conditions must be considered in connection with it.

6. Should not the students be required to devote their whole time and attention to their studies, to the exclusion of drug-store employment or any other

outside occupation during the entire college course? If not, how much longer should the college course be continued in order to offset the time lost by simultaneous wage-working?

7. What should be the minimum amount of obligatory school attendance weekly during the whole course?

In the pharmaceutical schools or colleges the actual practice varies considerably; the instruction occupies 6, 10, 12, 15, 19, 30 and 40 hours weekly.

8. What should be the minimum amount of obligatory laboratory practice in chemistry, pharmacy and pharmacognosy, respectively?

OF LABORATORY EXPERIENCE.

In actual practice the total obligatory laboratory work varies in different colleges from zero to over twenty hours weekly.

Can any valuable laboratory course in chemistry be accomplished in less than 200 actual working hours? And would it be too much to expect 300 hours' actual laboratory practice in chemistry, and the same number of hours in pharmacy as the minimum?

And, finally, if a "standard" is adopted, should it be the most complete and thorough course of pharmaceutical education practicable, without regard to time and expense, or should it be the best course the average pharmacist might be able and willing to accomplish?

The pharmacy laws of Ontario, Quebec, Victoria and Queensland are, perhaps, not explicit enough, but the colleges of pharmacy in those provinces have courses occupying six or more months. The School of Pharmacy of the Pharmaceutical Society of Great Britain at London gives a course of ten months, with the student's whole time devoted to his school work. Can a longer course be adopted as a minimum in America? If so, let us adopt a longer one.

In actual practice the American pharmaceutical schools or colleges give courses ranging from forty weeks to four years, if we are to compare them by the calendar time occupied. We have courses of 40, 42, 44, 46, 50, 52, 60, 76, 114 and 152 weeks, net time, respectively. At least seven pharmaceutical schools now offer courses occupying two years, with nine months' full work in each year.

It is highly gratifying that ambitious and eager students of pharmacy in our country can now take solid thorough courses extending over two, or even three or four years of full work. But while these schools are of great value and importance, and must exert considerable influence upon the further improvement and spread of pharmaceutical education, it is certainly equally true that those colleges of pharmacy which are striving to give as extended a course as a *considerable number* of students can be induced to take under existing conditions, are entitled to equal respect and support, and are performing an even more important use. Who shall answer which is the more important, the school for the thousands, the school for the hundreds, or the school for the tens?

Although there are at least 130,000

persons employed in the retail drug business in our country, and more than one-half of those are compounding the medicines on physicians' prescriptions, probably only about 10,000 of them are graduates in pharmacy; less than 3,700 annually attend any pharmaceutical school; less than 900 annually finish their college courses; less than 300 annually attend colleges in which the minimum of time required for the completion of the course is at least two terms of nine months each; and less than 100 of these have gotten beyond their first nine months' work. Nearly three-fourths of all the pharmaceutical students in the United States drop out after the "Junior course;" in other words, they devote only from twenty to thirty weeks of their lifetime to the special studies intended to prepare them for their life pursuit. Nearly nine-tenths of the persons who become registered pharmacists and assistant pharmacists, never attend any college of pharmacy.

TO POPULARIZE EDUCATION.

We may well ask, then, how shall a greater number of the persons employed in pharmaceutical work in our country be induced to attend the colleges of pharmacy, and how shall all who hereafter seek registration and license to conduct drug stores in which all kinds of technical pharmaceutical work is done, be induced to acquire the special education requisite for that work? For the accomplishment of these ends I do not believe that any substantial progress can be made by attempting to establish but one standard course of pharmaceutical education, or by a rivalry among the schools to give the longest course. If the apparent tendency continues we shall have, perhaps, courses of pharmaceutical education extending over five or six years before long. What we should try to do, it seems to me, is to gradually elevate the whole body of pharmaceutical workers to a somewhat higher plane, educationally, than they now occupy, and a portion of them still higher than the rest. In other words, let the question of three and four years courses take care of itself. Let us go down a little nearer to the level of the average education of the pharmacists of the day, and bring them up to as high a standard of special education as seems practicable, and let us be careful not to attempt to do at once that which it will certainly require many more years to accomplish. Let us not make the grave mistake of adopting a *minimum* standard of special college training in pharmacy so high as to be beyond the reach of the majority of the rising generation of clerks and apprentices. Instead, let there be *two* standards.

TWO DEGREES DESIRABLE.

It seems to me that each college of pharmacy might give two different degrees—one representing, perhaps, one full year's work, substantially as in the School of Pharmacy of the Pharmaceutical Society of Great Britain, and another representing an additional year's full work.

It is useless to ignore the fact that a large majority of all students are

greatly influenced by their ambition to secure a degree and a diploma as evidence of their work. Is there any valid objection to the adoption and general recognition of two different courses and degrees—one intended for the great majority of students and to be eventually made the obligatory minimum course for assistant pharmacists, and the higher or longer course to be eventually made obligatory for managers of pharmacies of the higher class?

If an able commission should formulate practicable minimum standards, I venture to predict that every school of pharmacy in the country would at once and cheerfully do more than these standards require.

No school need feel called on to give more than one fixed course or degree, be it the lower or the higher of the two; any school would still feel free to make its courses as much higher than the minimum standards as it may deem best; and there would be nothing to hinder any school from adopting a course two or three or ten times as extended as the highest standard recommended by the commission. There would always be plenty of room at the top; what we most need is a limit at the bottom.

The successful issue of such a movement as this would bring with it another result. It would necessarily help to minimize the jealousies and rivalries which exist between the several institutions—"a consummation devoutly to be wished."

Practical Experience in Pharmacy and State Boards and Colleges.

By W. BODEMANN,
Chicago, Ill.

QUERY 1.—Should students of pharmacy be required to give evidence of having had experience in a drug store before permitting them to graduate or register, regardless of quantity or quality of knowledge possessed?

QUERY 10.—Should graduates in pharmacy be compelled to pass the examinations of Boards of Pharmacy before being registered?

QUERY 13.—How can Colleges of Pharmacy be placed upon a purely educational basis, instead of being conducted for the money they can make?

QUERY 20.—Would it be a gain or loss to pharmacists to compel would-be apprentices to pass a Board of Pharmacy examination on their general education before permitting them to begin work in a drug store?

A paper suggested by Queries 1, 10, 13 and 20.

No State Board should register any person as a pharmacist or assistant pharmacist without absolute proof of a fixed term of actual employment in an actual pharmacy where physicians' prescriptions belong to the daily occurrences. It would not require a legal opinion to draw the line between the soda-counter experience and the actual pharmaceutical experience. In most States having pharmacy laws, this is already required, and it is not only the right but the duty of the State Boards to enforce the law in spirit and letter. A pharmacist—all pharmacists—should have four qualifications:

THE QUALIFICATIONS.

1. Good common schooling. If pharmacy is a profession, then it should require at least as much schooling to be a pharmacist as it does to enter a high

school. If any member of the American Pharmaceutical Association thinks this is too much to ask of a pharmacist, then I would thank him in the name of our "profession" to enlighten this body by telling us how little schooling would be sufficient to entitle a pharmacist to the boast of practicing a profession. If a board of pharmacy cannot insist on as much "education" for a candidate for registration as is expected of a fourteen-year-old boy or girl, then let us drop the claim that pharmacy is a profession or that our calling has a scientific character. If a candidate for registration furnishes proof of having gone through the grammar school with satisfactory result, then the State Board need not or should not insist on an examination in common school branches. But, if candidates do not furnish such proof, then in the name of common sense and consistency let there be an examination. It would be a downright farce to register anybody who cannot read, write, reckon and think correctly, even if he has been successful in "cramming" just enough to answer the usual questions in pharmacy and materia medica, and has spent a few years behind a counter.

2. A registered full-fledged pharmacist should have finished satisfactorily a definite minimum course in a college of pharmacy, and

3. He (or she) must have had at least three years' real experience in a real pharmacy, worthy of the name, and

4. He or she must in every case undergo a practical examination before a board of pharmacy.

EXPERIENCE AND COLLEGES.

Colleges should not require practical experience for graduation; they have plenty to do if they attend to their business, and that is—teaching faithfully and effectually. It is not the sphere of colleges to decide who shall be registered, and if their diplomas were recognized they would in effect decide this question for their graduates. It is the business of the State Boards to find out to their own satisfaction whether an applicant coming before them is fit to be registered, and to refuse to register all who are unfit by reason of illiteracy, insufficient special education, too limited experience in technical routine work, or inadequate skill in actual dispensing. College authorities are not in a position to find out if the drug store experience of candidates coming before them was *bona fide* pharmaceutical experience or not. College examinations can testify to the amount of theoretical training their students have had and to the amount of skill they displayed in the laboratories, if laboratory work is embraced in the curriculum, but there it rests. A college diploma is no more a certificate of sufficient experience in drug stores than a certificate of vaccination could be passed for a bank bill. It is entirely clear to my mind that if diploma recognition for purposes of registration is abolished, all graduates in pharmacy being required to take the State Board examinations, and all colleges left to their legitimate work, the colleges will soon be placed upon a "purely educa-

tional basis" and rated at their real worth, on their own merits. To mix up the duties of colleges and State Boards is detrimental to both. It does not elevate the position of any college of pharmacy to demand that its graduates be exempt from State Board examinations. I respect any college of pharmacy to the full extent of its real worth, and I would certainly think more highly of all colleges if they would recognize the handwriting on the wall, and give unto Cæsar what belongs to Cæsar; and the sooner the more gracefully the colleges abandon the exercise of functions belonging to the State and the State Boards, the higher my respect, and the better for the colleges, the Boards, the graduates, and last, but not least, for the candidates for registration.

COMMERCIAL VALUE OF DIPLOMAS.

Since the Educational Section of the American Pharmaceutical Association raised the question, "How can colleges of pharmacy be placed upon a purely educational basis, instead of being conducted for the money they can make?" it cannot be considered a *lèse majesté* for me to discuss this question. It should be a libel on the colleges of pharmacy to bring this Mason and Dixon Line into this convention. Take away the commercial value of your diplomas, which they have when used as substitutes for State Board examinations. While this is not by any means all we should strive for, it is decidedly the first and most necessary thing to be done to elevate our colleges to the purely educational basis. I do not believe that any college of pharmacy worthy of the name is conducted for the money it can make, nor do I believe that any college giving a reasonably good course of instruction, including laboratory work, can make any money at all; indeed, good colleges are in luck if they pay running expenses. It is said that it takes three things to conduct war, namely money, money and money; this applies equally to the running of a good college of pharmacy.

To make our pharmacy laws amount to something, the State Boards must have full swing and shoulder all responsibility for the candidates they admit to the practice of pharmacy. Recognition of diplomas is too convenient for both boards and colleges. The same is true of the practical experience required for registration. The boards must settle that to their own satisfaction and in their own way, and not take for granted that a graduate of pharmacy has had satisfactory experience, simply because the college from which he graduated requires practical experience for graduation. This requirement amounts to nothing in reality, even if the proof consists of affidavits, which according to Shakespeare, are more plentiful than blackberries. The registration of apprentices by the boards is the only true method. If the signature of board members on a registration certificate stands for anything at all, it should stand for conclusive evidence of practical experience. If you want a certificate of special education, ask for the college diploma.

Both stand for a definite thing, and both are good just for what they are worth. Neither can or should take the place of the other.

Graduates in Pharmacy and Board Examinations.

BY HENRY R. SLACK, M.D., PH.M.
La Grange, Ga.

In order to discuss this question intelligently, it is necessary to consider briefly the relations existing between the college and the Board, to the profession and the public.

The object of the true college is not revenue, but to educate the pharmacist, make him more proficient and useful, and dignify his calling by elevating it to a professional standing. Surely this is a high and noble aim, worthy of our best thought, but it is not identical with that of the Board. The preamble introducing the Georgia law sets it plainly forth, that the Board is created to protect the public against the indiscriminate sale of poisons and dispensing prescriptions by incompetent persons. The laws in other States are enacted for the same purpose. If they are not, then as a distinguished professor said in a paper read in New Orleans: "The sooner they are repealed the better; legislation for the benefit of classes is productive of much evil" (Prof. Remington, Recognition of College Diplomas by State Laws, 1891). I, however, take issue with the professor, on recognition of college diplomas as a license to practice pharmacy. I hold that it is to the interest of the public, the profession, and the college, for State laws not to recognize diplomas.

This opinion is not the result of prejudice; but mature consideration and seven years' experience and observation as examiner on a State Board, has forced upon me this conclusion. My judgment differs from my preconceived notions, for when first appointed on the Board I strongly advocated recognition of diplomas; but "Times change and men often change with them." The causes that led to this change were these: Our law recognized both medical and pharmaceutical diplomas; to extirpate the one it was necessary to sacrifice the other. We hesitated for some time, but seeing the medical men outnumbered us nearly ten to one in the legislative halls, we yielded, and thus necessity compelled "building better than they knew."

No one in this presence will claim that a medical diploma should confer on its holder the legal right to practice pharmacy, any more than he would hold to the right to practice medicine on a pharmaceutical diploma. Pennsylvania, the mother of pharmaceutical colleges is, or was until recently, the only State to repudiate her own offspring and confer a pharmaceutical dignity on medicine refused to pharmacy herself. No wonder one of her brilliant professors waxed warm his denunciation of "the legal degradation of a pharmacy diploma" by exempting the doctor and examining the pharmacist. In his condemnation of this injustice we heartily concur; but we hold that it is no degradation to the holder of a diploma to

be given the privilege of showing, to intelligent judges, how much knowledge that diploma represents. This is a much more uncertain quantity than the friends of pharmaceutical education desire. The juniors from some colleges not infrequently pass far better examinations than graduates of other institutions conferring the same degree. Here is the great advantage a thorough school enjoys in having its work passed upon by unprejudiced examiners, not connected with the institution.

THE TEACHING SCHOOL OR, THE DIPLOMA MILL.

Of course we recommend to young men applying to us, not the school that is cheapest, nearest, or has the largest number of students, but the one that sends us the best prepared men. Thus an opportunity is afforded for us to distinguish between the teaching schools and the diploma mills—and how else could this be obtained except by a compulsory examination?

Another cause that has largely influenced me in forming my opinion is the present status of the medical profession in Georgia. Here a diploma from any chartered college, and a \$10 professional tax, is a license to practice medicine; and what is the result? There are four medical colleges where one would be sufficient; and they have almost degenerated into diploma mills that vie with each other in grinding out the most graduates. These schools confer degrees on over 95 per cent. of the second course men, and on practically all the third course men. So great has become this evil, and the fact that Georgia is becoming the dumping ground for rejections from other States, and the Paradise for quacks, that the better element of the entire profession are now favoring a bill to create a board, similar to the Pharmacy Board, to review the work of the medical colleges, and to protect the public.

THE MEDICAL COLLEGE ANNEX.

Four years ago, three of the medical colleges issued prospectuses for pharmaceutical adjuncts, and with one additional instructor, lecturer or professor, were preparing to grind out Ph.G.'s, as well as M.D.'s; but, unfortunately for these conceptions, the pharmacy law was changed, so that no diploma was recognized, and only one has gone full term and been delivered of a class of Ph.G.'s. One of the colleges, finding that she had miscarried with Ph.G.'s, is now bringing forth LL.B.'s.

Now, while we oppose registration on diploma, we heartily favor reciprocity among the State Boards, where the candidate has made 5 per cent. over the requirement to pass the examination. This may seem paradoxical or inconsistent, but that it is not can easily be proved.

1. Any four or five men can secure a charter for a college and confer degrees, but no State has more than one Board, except New York, which is the proud possessor of four.*

2. There is greater uniformity in State examinations than in college,

and less inducement to pass inefficient men.

3. Requiring 5 per cent. above the average to pass enables a Board to discriminate between those whom they think would be safer in other sections, and those whose horizon is as limited as the oyster's.

To sum up the foregoing briefly, not recognizing diplomas, is to the interest of the public, in that it protects them from incompetent men; to the college, by protecting them from diploma mills and making manifest their good work. It is plainly to the interest of the profession, because nothing lowers professional standards more rapidly than having a large number of poorly equipped colleges turning out ignorant men armed with a degree that carries with it license to practice that profession.

Is Shop Experience Necessary?

BY PROF. OSCAR OLDBERG.

The query is: "Should students of pharmacy be required to give evidence of having had experience in a drug store before permitting them to graduate or register, regardless of the quantity or quality of knowledge possessed?"

In answering this query we will assume that by "drug store" is meant a properly conducted and reasonably well-equipped "apothecary's shop;" for experience in any other kind of a drug store has no value except from the purely mercantile standpoint.

But shop experience as a requisite for graduation is one thing, and the requirement of shop experience as one of the conditions of registration is another.

PHARMACEUTICAL EDUCATION DEFINED.

Pharmaceutical education in the broadest sense consists of two distinct parts: 1, systematic special course of instruction in technical schools; and 2, proper shop training. Both kinds of education are necessary to the complete development of such pharmacists as might in truth be called well-trained professional men. College courses in pharmacognosy, chemistry and pharmacy are as indispensable to the pharmacist as the medical college is to the physician; yet the college of pharmacy alone cannot impart to the student that practical familiarity with the requirements, exigencies and dangers of the daily routine of the apothecary's shop which comes from continued experience any more than the medical college can turn out ready-made skilled physicians and surgeons. Neither can well educated, accomplished, pharmacists be produced by shop training alone, any more than it would be practicable to have a respectable medical profession without the aid of good medical schools. That which a good pharmaceutical school does for its students can never be done for them by the shop and that which good shop practice does for the apprentice and the clerk can never be done by any college.

The well-trained college graduate in pharmacy is prepared to see more clearly and act more intelligently, and, if he has had sufficient laboratory instruc-

tion, he can apply the tests prescribed by the Pharmacopoeia. He finds that his fellow clerk, who has had several years of good shop experience, but never attended a college of pharmacy, cannot write or understand the simplest chemical equation, is unable to make any use of the simplest pharmacopoeial tests, and betrays his ignorance upon many important matters having a direct bearing upon the work in which he is engaged. As a natural consequence the college graduate is very apt to over-estimate the relative importance of his college training, and to underrate the value of the training of the shop, especially if his own shop experience was insufficient or of poor quality.

Per contra, the shop-trained clerk might have had the good fortune to "learn the business" in a good store under a well qualified preceptor. If so, he observes that the college graduate without sufficient shop practice is perhaps unable to decipher some of the prescriptions which he himself can read at a glance. He sees that the college man does not make a more perfect pill or emulsion, or he may indeed discover that the college graduate is slow, awkward, lacks the workmanlike readiness and skill, the confidence tempered by intelligent caution, in short the reliability, which is never attained except with actual participation for years in the daily routine of the shop. And thus the shop-trained man may be unable to recognize the value of a college course.

SHOP VS. COLLEGE TRAINING.

The college-trained man, with insufficient shop-experience, and the shop-trained man without special college education, are both only half educated.

What we should have is both special pharmaceutical college training and sufficient shop experience. Then let the college and the shop mutually respect each other.

It should be kept clearly in mind that the college of pharmacy can neither furnish, nor regulate, nor verify, nor estimate the value of the shop experience of its students. Hence it should not undertake to vouch for it. Therefore the college of pharmacy should, in my judgment, have nothing to do with it. Not only is this enforcement of practical experience in drug stores wholly outside of the proper functions of any college, but the college has no effective or reliable means by which it may protect itself, the public, and its graduates, from the impositions which may be practiced, with or without fraudulent intent, in regard to the quantity or quality of the practical experience claimed by and for candidates for graduation. At the same time, there is a rational, systematic and reliable method of enforcing this necessary requirement of a complete pharmaceutical education, through the State Boards of Pharmacy.

THE POSITION OF THE STATE BOARDS.

The State Boards have the power to prescribe whatever rules they may deem necessary to the proper enforcement of the law, and can withhold the license or certificate of registration unless

* Texas practically has no pharmacy law.

these rules are complied with. Then let us have an effective system and no half-way measures.

There should be a perfect system of registration by the State Boards of all apprentices and clerks in all drug stores, and no person should be credited with any period of apprenticeship except after such registration. Whenever a young man goes into a drug store he should at once report his name to the State Board, together with proper evidence of sufficient preliminary education, and his employer should certify to the fact that the young man has actually entered upon a *bona fide* engagement in the store to learn the business. The apprentice should be required further to report any changes from one store to another, and such other precautions should be taken as would insure a complete and correct record of his whole period of "practical experience." The penalty for any false return should be a forfeiture of the credit for all or a part of the apprenticeship period, or of the right of registration, or the forfeiture of a license already issued, if fraud be discovered after the licensing. Any registered apprentice, registered assistant pharmacist, or registered pharmacist, whose name and record of active service may be found upon the books of the Board of Pharmacy, should continue in the enjoyment of his privileges as long as he observes the law, and should be liable to forfeit them if he wilfully violates it. That this system is practical we know from the fact that it is in actual use in several countries, among which are Ontario and Quebec, Canada, and Victoria and Queensland, Australia, where the conditions of the drug business are the same as in our own country.

Board of Pharmacy Examinations.*

By H. M. WHELPLEY, M. D., Ph.G.

In the first place permit me to say that I consider board and college examinations to be entirely distinct and separate in their requirements. The college ordeal is given after two or more years of careful training and is based on the maximum demands on the pharmacist entering the field of activity in his profession.

WHAT A BOARD EXAMINATION SHOULD BE.

A Board of Pharmacy examination is a test to determine whether or not the applicant will be able to conduct a drug store with the exercise of due knowledge and skill. The questions should all be selected from the many that are daily arising in the business and which the competent pharmacist can answer at any time without reference to his books. The practical nature of a board examination demands that it can be passed at any time by the competent pharmacist without previous "reading up" for the occasion.

It is simply ridiculous to make a candidate's fate depend upon questions

that he will never be called upon to answer in the exigencies of the business! I never could understand why some boards give a large number of questions that cannot be answered without special cramming for the occasion. Perverted in nature is the examination which the candidate can pass to-day but will fail to master after an additional year of drug store experience.

The licentiate in pharmacy should possess at least the minimum amount of knowledge and skill in the profession and trade to insure that he or she is a safe person to intrust with the responsibilities of conducting a drug store.

The amount and nature of the preliminary education possessed by the applicant should have its influence on the Board. It is not only legitimate, but a Board's duty to discourage the ignoramus who aspires to become a druggist through the short cut road of a Board examination.

The recognition of drugs, galenicals and chemicals deserves a prominent place in the examination. No specimen should be given that cannot be recognized by its shape, color, odor, or taste.

The verbal questions about the specimens recognized appropriately cover medicinal action, doses, names, trade varieties and properties of a good specimen, adulterations, substitutions, pharmaceutical preparations, etc.

ACQUAINTANCE WITH DRUG JOURNALS.

Although not generally recognized, I believe that Boards of Pharmacy should question prospective druggists as to their knowledge of the state pharmacy law, familiarity with the purpose of colleges of pharmacy and their pharmaceutical journal acquaintances.

The above query calls for principles rather than details, so I omit specific examples of examination questions modeled on the plan just outlined.

Laws are for the common good of the people and may work hardship in individual cases. A Board of Pharmacy should conscientiously discharge its duty, but need not give examinations of a nature that justly renders the body unpopular alike with the pharmacist and the public.

DETERMINING ELEMENTS.

The length of time a pharmacy law has been in force is an element in determining the nature of the examinations. More care should be exerted to shut out the incompetent tyro than in persecuting the druggist who has become a fixture in the business, although he may be of an antique pattern.

A deaf ear must be turned to the apprentice who pleads for a special examination because he expects to run a general store at some cross roads where prescriptions are never seen. The possession of a certificate of registration is very likely to change his mind and you may hear from him as proprietor of a new drug store in some locality where the crying demand for more pharmacists has long since been satisfied.

No Board of Pharmacy examination can be complete without requiring actual work in the reading and compounding of prescriptions. The candidate

should be required to demonstrate his ability in reading ordinary prescriptions, making pills, emulsions, spreading plasters and doing other dispensing work.

The Preliminary Education of Apprentices in Pharmacy.

By PROF. OSCAR OLDBERG,

Chicago, Ill.

The necessity of a satisfactory preparatory education of those who enter drug stores to learn the art of pharmacy has been again and again asserted in this Association. Yet, no progress has been made. Under our laws every drug store must be conducted by a "registered pharmacist," and, therefore, every manager of a drug store is a pharmacist. The boy he takes into his store to learn the business becomes an apprentice, and a drug clerk, or the proprietor of a drug store, in the course of time. No matter how ignorant he may be, having gotten in, he very rarely gets out again.

Every intelligent man, who honestly and earnestly desires to see the day when a satisfactory standard of education shall be established in our profession, must realize that at the bottom of any shortcomings in that direction lies the absence of restraint upon the introduction of unfit recruits.

Only a small proportion of these apprentices, and generally the better part of them, ever come to the colleges of pharmacy. Hence the college cannot remedy the evil.

There seems to be no way by which the influx of unfit material can be prevented, except through the State Boards of Pharmacy.

A person who has not gone to school long enough to learn to spell common English words or to estimate correctly the quantities required for the production of a given amount of a solution of any fixed percentage strength, or to calculate the size of each single dose of a poisonous ingredient in a prescription, cannot be fit to become a pharmacist; and this is so self-evident that in the absence of any specific legal standard of a preliminary education of apprentices, it is the duty of the Boards of Pharmacy to examine into the fitness of all candidates for registration, not only with reference to their knowledge of chemistry and pharmacy, but also with reference to their general intelligence and education.

The introduction of a fixed minimum standard of compulsory preliminary education of apprentices must be brought about; but, until this shall have been accomplished, the State Boards should refuse to register as a pharmacist or assistant pharmacist, any candidate whose preparatory education is of so low a grade as to render it plain that he never ought to have undertaken to learn chemistry and pharmacy. The scholars of our public schools are not allowed to enter the high school until they are fitted to do so; why should any one be permitted to enter upon the study of pharmacy until reasonably prepared for it?

The lowest standard of compulsory preliminary education that might at

*This paper was presented in reply to Query No. 11.—"What principles should guide Boards of Pharmacy in passing their examination questions."

first be adopted is one equivalent to the requirements for admission to the best American standard high school. If the State Boards of Pharmacy would henceforth require at least that amount of general education of every candidate for registration, we would at once begin to make marked progress. Examinations of candidates to determine their general education might be omitted in all cases where satisfactory evidence is presented by them showing that they possess the education required.

No real general improvement in the status of pharmaceutical education can be expected without positive measures to compel sufficient preparatory education, and a sufficient standard of the compulsory preparatory education of all persons who enter drug stores to learn pharmacy is no less important than the pharmaceutical colleges, the pharmacy laws, and the State Boards of Pharmacy.

The Use of Isobutylic Alcohol for the Detection of Morphine and Codeine.

BY J. B. NAGELVOORT.

Detroit, Mich.

The introduction to this subject may be very brief. From the frequent inquiries the writer has received in the course of a year for a method as given below, it seems not to be a superfluous task to review, condense and elaborate the better and the less well-known details of methods whereby the dispensing physician and the druggist in the practice of his daily life can prove the presence of morphine beyond a doubt, to the satisfaction of an expert analyst or for his own satisfaction as well.

Every candid friend of our profession will agree with me that here is a moral duty to perform. It is a daily occurrence that we have a suspicion of the presence of morphine in patent medicines of different character, and the general sentiment imposes an obligation upon every one who is under favorable conditions and has the resources and the disposition for "work" to let the community have the benefit of it.

The literature on morphine determinations is far and widely dispersed; some of it is broadly treated; some information is very shallow, much is disappointing to the student, since it leaves too many mooted questions unsettled.

Amylic alcohol used to be considered valuable for the detection of morphine, but, as every one knows, this liquid is very offensive.

I have done entirely away with this bad-smelling, headache and cough producing amylic alcohol, by the systematic introduction of isobutylic alcohol, a member of the same series of higher alcohols, which is much more pleasant to handle.

Three to four years ago isobutylic alcohol was recommended in the *Chemiker Zeitung* for this purpose. But I have not been able to find any results, in literature, of its application; I have carefully searched the abstracts of the *Journal of the Chemical Society*.

PROCESS A.

For detection of morphine in pharmaceutical preparations, patent medicines and similar compounds, cough syrups, emulsions, pills, etc.

A. If the volume under examination is bulky, or there is much of it, take 250 Cc acidulate with HCl and transfer the acid mixture to a dialyzer, which is to be examined previously, to see that there can be no loss of a substance which could not be replaced. Keep one-third of the original substance back. Submit the substance under examination to dialysis for about 24 hours.

B. Evaporate the clear, dialyzed fluid on a water bath to a minimum. Take a part of this ($\frac{1}{2}$) and add it to a solution of 0.1 Gm. KIO₃, and five drops acetic acid in five Cc. of water. Warm it on a water bath. If a reduction of iodine takes place, that is, if the fluid becomes brown, add a few drops of 10 per cent. ammonia water. This decolorizes the brown mixture, if morphine is not present. If one has to be economical with the fluid to be examined for morphine, slips of unsized paper can be moistened repeatedly with it, dried every time, and the KIO₃ solution applied to them. It is an indication of the presence of morphine if the brown color remains.

C. Transfer the balance of the dialyzed fluid to a separator; warm to 60° or 75°. Add an equal volume isobutylic alcohol to it; make alkaline with q. s. of 10 per cent. of ammonia water (verify alkalinity with litmus paper). Agitate five minutes and keep it warm. Reject a watery fluid (the lower layer in a separator). It is needed, in some complicated mixtures, to wash the isobutylic alcohol with a small quantity of water, at the normal temperature, and reject this also.

D. Agitate the isobutylic alcohol three times, with three successive portions (10, 10, 5) of 5 per cent. H₂SO₄; removing each portion separately to another separator. Prove excess of acid by litmus paper.

E. To the separated acid water add an equal volume isobutylic alcohol; warm 60°-75°; make alkaline with a sufficient quantity of 10 per cent ammonia water; prove alkalinity with litmus paper. Agitate the warm fluid continuously for five minutes.

F. Separate isobutylic alcohol. Evaporate six equal portions of it in small beakers, previously scrupulously cleaned. Evaporate also a portion of the isobutylic alcohol which is in use, to dryness. Verify if the isobutylic alcohol leaves a residue. If so, it is to be rejected and other isobutylic alcohol used in this process.

G. Dissolve residue No. 1 in a few drops of water, acidulated with acetic acid; add this solution to a solution of KIO₃, as described under C.

Dissolve residue No. 2 in two drops of conc. H₂S₂O₈; warm one-half hour on the water bath; spread a drop of the acid in a thin film on a porcelain lid; touch it with a pointed glass rod moistened with HNO₃; violet and blood-red color reactions show the presence of morphine; if the mixture discolors morphine is not present.

Dilute a drop of a concentrated FeCl₃ solution, which must be free from uncombined HCl, with three drops of water. Add one drop of this solution to residue No. 3; morphine is present if a blue color reaction shows itself.

Submit residue No. 4 to contact with

a freshly prepared mixture of 0.02 Gm. ammonium molybdate, triturated to a fine powder, add five drops of concentrated sulphuric acid. A lilac color shows the presence of morphine. Slowly the mixture changes to a permanent blue color; this is not a morphine reaction, however, but a decomposition product of the ammonium molybdate.

Residue No. 5 must be submitted to the contact with a freshly prepared mixture of 0.02 Gm. titanate acid and five drops of concentrated sulphuric acid. A reddish brown color, constant for an hour with 0.0001 Gm. of morphine, proves its presence eventually.

Residue No. 6. Pure bismuth subnitrate, taken instead of titanate acid, gives a black color reaction, when a comparatively large quantity of morphine is present. I found that 0.0001 ($\frac{1}{10000}$) Gm. to cause a yellow-brown coloring of the morphine. The black spots, caused by a larger quantity of morphine, change to yellow-brown stripes when a glass rod is drawn through them.

QUANTITATIVE ESTIMATION.

Quantitative estimations of morphine in medicines are very problematical. Morphine is sensitive enough to chemical tests, but it is not so easy to isolate it. In connection with the purpose of this paper one would like to know to what extent morphine can be added to "medicines" without detection. I have added repeatedly 0.025 Gr. to 4 fl. ounces of mixture, and found it back in parts of such estimation. Larger doses will already have been detected by their physiological effect, while smaller might be considered harmless.

PROCESS B.

For bulky volume and small quantities; e.g. in a cough syrup.

A. Taking as example a colorless syrup, one can add 1 Cc. of it to the KIO₃ test (see above) directly. Proceed if the test gives indications for morphine as follows (which procedure is to be applied to other mixtures as well):

B. Warm two-thirds of the original liquid to 60° or 75° (preserving one-third), or take 1 Cc. of a cough syrup, and dilute it with water to 5 Cc. and warm this dilution. A large test-tube does very well for this purpose. Add an equal volume isobutylic alcohol and make alkaline with q. s. ammonia water 10 per cent. Prove alkalinity with litmus paper. Agitate strongly for a few minutes. Transfer the top layer alkaline of isobutylic alcohol with a pipette to another test tube.

C. Add 5 Cc. water, acidulated with H₂SO₄, to it (prove acidity) and agitate strongly for a minute. Remove top layer isobutylic alcohol with a pipette. Wash acid water twice with petroleum ether. Take petroleum ether away with a pipette (benzine is equally good, morphine being equally insoluble in either.)

D. Warm the acid water in a water bath; add an equal volume isobutylic alcohol to it, and make alkaline with q. s. 10 per cent. ammonia water. (Prove alkalinity by immersing a small strip of litmus paper in the fluid.) Agitate strongly for one minute.

E. Remove the alkaline top layer of isobutylic alcohol with a pipette and evaporate equal portions of it in clean beakers as described above. Proceed further as directed there—Process A.

Repeat with a larger quantity of original fluid, when all of the reactions are not obtained successfully; the Fe_2Cl_3 test may fail, while the KIO_3 , the ammonium sulfomolybdate of ammonia, the titanous acid tests appear as evidence for morphine.

EXAMINATION OF PILLS AND TABLET TRITURATE FOR MORPHINE.

Proof that it is a morphine pill or morphine tablet triturate with which we have to do.

Take one of the sugar-coated pills, as they are sold, warranted to contain $\frac{1}{4}$ of a grain morphine sulphate, and dissolve it in five (5) Cc. of water, in a test tube. Add five (5) Cc. isobutylic alcohol to it; put the test tube on a warm place; add a few drops 10 per cent. ammonia water to the solution, when warm, and agitate strongly during one minute. Allow the isobutylic alcohol to separate, take it up with a pipette when it is separated clearly and transfer it to a clean beaker. Evaporate it to dryness. Dissolve the residue in six (6) Cc. absolute alcohol.

I. Evaporate one (1) Cc. of this alcoholic solution on a porcelain lid to dryness. (Porcelain lids are matchless utensils for color reactions; their immaculate white surface offers the best obtainable background for color-reactions.) Dilute one drop of a concentrated Fe_2Cl_3 solution with four (4) drops of water; add one drop of this diluted ferric chloride solution to the invisible residue of the evaporation; immediately a green-blue color will appear if the pill was a morphine pill.

II. Evaporate another Cc. to dryness on a porcelain lid, add to the residue two drops concentrated H_2SO_4 and warm it, on a water bath, for an hour. Usually the sulphuric acid has become brown thereby. Spread the acid out on the lid, in as thin a film as possible; draw through this film a glass rod of the size of a match, previously moistened with concentrated HNO_3 . The appearance of a blood-red color is another evidence of the presence of morphine.

III. Evaporate another Cc. of the alcoholic solution to dryness, this time in a beaker; add one (1) Cc. diluted acetic acid to the residue and follow process A, C, G.

Since the above tests prove the presence of morphine in a pill beyond a doubt, one can continue his research with isobutylic alcohol on a codeine pill.

Let us suppose it was to be decided that morphine was openly or clandestinely added to a pill, with or without notice.

It is now under consideration if codeine is present.

Take as before $\frac{1}{4}$ of a grain sugar-coated pill, sold for a codeine pill. Treat as above, A.

Dissolve residue No. 1 in one drop concentrated H_2SO_4 and stir in this solution with a small glass rod, previously moistened with concentrated HNO_3 . A green color reaction will appear, even in this residue of a $\frac{1}{4}$ or a $\frac{1}{8}$ of a grain pill, if codeine is present.

Dissolve residue No. 2 in a drop concentrated HNO_3 ; it will color yellow, codeine being present; distinctly to be seen from $\frac{1}{4}$ of a $\frac{1}{8}$ of a grain pill.

Dissolve residue No. 3 in one (1) drop conc. H_2SO_4 , draw a very small glass rod, previously moistened with the same diluted ferric chloride solution as used above for morphine, through it, warm on the water bath for a few minutes. Green to violet colors appear when codeine is present in the same small proportion.

Other codeine reactions are too much of a negative or a less characteristic nature to be useful in this investigation. But codeine is not of such a harmful nature as morphine, neither is its addition to medicine, openly or clandestinely, as criminal.

Benezech stated (*Pharm. Zeitung* for 1892, p. 545) that malva flowers contain a coloring matter which turns green with codeine, while this coloring matter is not affected by morphine. I have verified this statement and found that it makes a useful addition to our list of reactions.

I took a red Hollyhock flower (*Althea rosea*) (Benezech's statement did not mention any special malva), boiled it with 10 Cc. of water, and filtered.

Two drops of the purple-colored filtrate added to a solution of a $\frac{1}{4}$ grain codeine pill in two Cc. water colored this solution green. This green color was to be seen even after 24 hours.

The purple solution had no effect when added to a solution of a $\frac{1}{4}$ of a grain morphin pill.

A Microscopical and Chemical Examination of Cloves.*

BY HENRY KRAEMER.

More than a year ago, a sample of a spice was submitted to the author, an examination of which revealed the presence of a large quantity of starch. The question was then asked: "How much is there of this adulteration?" A quantitative answer was desired without a chemical analysis. This was the beginning of the present work, and very naturally the thought arose, is it possible to obtain quantitative as well as qualitative results with the microscope? The results are embodied in this paper—which is intended, however, merely as a preliminary paper—on the comparison of quantitative microscopical with chemical examinations, and it is hoped will reveal the possibilities of research in this direction. * * * While I have been at work upon the subject for some time, the work has been done under rather disadvantageous circumstances, and it is presented at this meeting to elucidate a principle, and present the results of what may be an incomplete method, for your consideration.

The method of procedure is as follows: A measured quantity (about 0.20 Gm.) of substance is thoroughly mixed with a measured amount (2 or 3 Cc.) of water. One, two or three drops formed on the finger of this mixture are placed in the slide and covered with a cover-glass. In the eye-piece of the microscope is slipped a piece of glass

corresponding to an ocular micrometer, containing 100 square Mm. By a little practice a slide may be prepared that is fairly uniform, or uniform places upon it may be selected. This being done, then a count is made of the number of starch grains, fibers, or characteristic tissue in the spurious substance, contained in 100 square Mm., and the same compared with a genuine sample. For instance, mixtures were made of genuine cloves with potato-starch, wheat-starch, cedar-wood, turmeric, and it was observed that quantitative relations by comparison, do to some extent hold even in this crude way of procedure. In determining the oil a slightly different method was pursued.

The author also experimented with the view of obtaining quantitative results upon the oil contained in cloves. For this purpose a small extract or graduated to a mark, was made out of a piece of glass tubing. This was filled to the mark with cloves and exhausted with ether, the whole operation requiring about one minute. The ether containing the oil was allowed to drop in a watch crystal containing a few drops of alcoholic KOH solution, the potassium eugenol forming at once and the ether evaporating. To the residue was then added a known quantity (2-3 Cc.) of water, the mixture thoroughly stirred, and a drop of the liquid collected on the finger and used on the slide. 25 square Mm. were examined and the number of square Mm.—approximately—filled with crystals were counted.

The Detection of Hydrochloric Acid.*

This is not an easy matter in the presence of hydriodic and hydrobromic acids. Messrs. Villiers and Fayolle, however, propose a method which is founded upon the difference of the action of the halogens upon an acid solution of aniline, iodine producing no apparent reaction, or at least giving a colorless and soluble substitution product, bromine yielding an insoluble substitution product, perfectly white, while chlorine forms colored oxidation products black and insoluble, if it is in considerable quantity, violet-red in heat, blue in cold, and turning to red after some time in the contrary case.

The sensitiveness of the reagent depends on the acidity of the solution; a solution not acid giving no results, while a large quantity of a mineral acid takes no coloration, or is quickly decolorized by the heating. It is preferable to use acetic acid, which does not decolorize on heating.

The following is the formula adopted:

Saturated aqueous solution of colorless aniline.....	400 Cc.
Glacial acetic acid.....	100 Cc.

* This liquid may be preserved indefinitely in yellow bottles without becoming colored.

The liquid under examination is brought by evaporation or by the addition of water to the volume of 10 Cc., and placed in a flask. We add 5 Cc. of a mixture of equal volumes of sulphuric acid and water, then 10 Cc. of a satur-

* Abstract.

* *Chemical Trade Journal.*

ated solution of potassium permanganate, and heat gently, turning the gases into 3 to 5 Cc. of the reagent contained in a test-tube immersed in cold water. In the absence of bromine and iodine we obtain thus with 0.1 m.grm. of hydrochloric acid a blue coloration, which is transformed (slowly in the cold, but rapidly in heat) into a more distinct rose color.

Hydriodic acid alone gives no reaction. Hydrobromic acid gives a colorless precipitate. In the presence of all three acids the chloride gives a reaction ranging from a black precipitate to a faint rose tint, enabling one to detect hydrochloric acid in presence of the other hydracids, even in slight proportions. Thus we may recognize the presence of chlorides in a great number of commercial bromides and iodides. In like manner, on adding at once bromine-water to the reagent the color of the precipitate obtained can show the presence of chlorine in the bromine, if the former is in a sufficient proportion, as it is often the case in commercial bromine.

The formation of bromine chloride, however, largely masks the reaction. To overcome this Messrs. Villiers and Fayolle, in a subsequent paper, have proposed to separate the hydracids by silver nitrate. The precipitate is washed and then conveyed into a small flask, into which, after having decanted the liquid, there are added 10 Cc. of water and 1 Cc. of pure ammonia. The flask is shaken for some minutes if it is required to find considerable quantities of hydrochloric acid. If traces have to be sought for, the ammonia is left for some hours in contact with the precipitate. At this dilution the ammonia does not dissolve appreciably the silver bromide, and has no action at all upon the silver iodide. On the contrary, the chloride dissolves to a considerable extent (even totally if very little hydrochloric acid is present), especially if we wait a sufficient time so that the bromide which is dissolved at first may be displaced by the chloride. It is now required to reproduce the hydrochloric acid in the ammoniacal liquid. Zinc and sulphuric acid give bad results, and small quantities of chlorine may disappear entirely while the zinc is dissolving, probably from the presence of some impurity in the zinc. It is preferable after having filtered the ammoniacal liquid to heat to ebullition until the ammonia has entirely disappeared, and to add an excess of a solution of sulphureted hydrogen. We then boil again so as to reduce the volume of the liquid to about 10 Cc., and filter the liquid into a flask. The operation is completed as previously directed.

In the case of analysis the differences of colorations will readily enable us to distinguish if we have to do with notable quantities of hydrochloric acid or with mere traces. The application of this process pre-supposes the absence of hydrocyanic acid, which gives a precipitate of silver cyanide more soluble in the ammonia than the chloride, and which in the further treatment may mask, partly or totally, the chlorine liberated by the permanganate, producing hydrochloric acid and cyanogen chloride. To obviate this cause of error

the hydrocyanic acid may be expelled by evaporation along with sulphuric acid until vapors of sulphuric acid begin to appear. The retort is allowed to cool, water is added, and the liquid is distilled afresh. The distillates are united and partially evaporated. By this test 0.001 parts of HCl can be detected with the presence of 0.015 of HI and 0.05 of HBr.

How to Keep Labels.

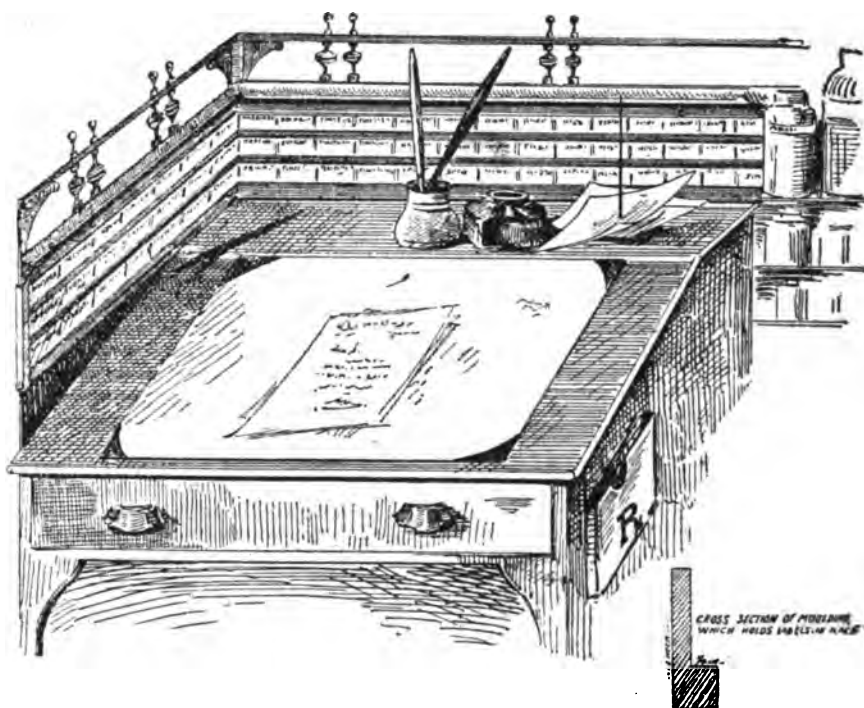
Frank T. Green describes in the *Pacific Druggist* a method of keeping labels which permit of alphabetical arrangement and at the same time allows of the removal of separate labels without dis-

same little boxes. Keep your labels in them, labeling the lid of the box with one, two, or three kinds, as needed in maintaining alphabetical order.

The cost of this whole arrangement is nominal, and it is satisfactory. In placing this method before our readers it is to show one way, and not the only way. Any means taken to maintain order and system in a pharmacy serves to lighten the tasks of that man of careful detail—the pharmacist.

Curious Property of Aluminum.

Charles Margot, preparator at the physical laboratory of the University of Geneva, has recently made a curious



GREEN'S LABEL CABINET.

turbing the remainder. By employing strips of wood, the cross-section of which is shown in the illustration, labels can be held in place above the desk, even when there are but three to five inches of running space to spare. As for curling up, that tendency is taken advantage of, that quality holding each little bunch in place.

Mr. Green states that the method shown by the illustration has been employed for the past five years, and with satisfactory results for the ordinary $2\frac{1}{2}$ by $1\frac{1}{4}$ inch labels, which are used to designate the contents of bottles when sold direct over the counter.

A drawer partitioned off is probably best for stock labels, such as are used to label the products of the laboratory which the druggist puts up at his leisure. The method as shown in the cut does not file the general stock of such labels ($2\frac{1}{2}$ by $1\frac{1}{4}$ inch). In order to store these away handy and yet be well kept it needs but a few dozen paste-board boxes $3\frac{1}{4}$ x $2\frac{1}{4}$ x 3 in. deep, such as the homeopathic tinctures and pellets, which we retail, come packed in.

Fill a drawer completely full of these

discovery concerning aluminum. He has found that if glass be rubbed with a piece of this metal, very brilliant markings will be obtained that no amount of washing will cause to disappear. This property of aluminum of adhering firmly to glass, and to silicious substances in general, is especially manifested when the rubbed surface is wet with water or simply covered with a stratum of aqueous vapor.

Mr. Margot has constructed a small aluminum wheel which revolves very rapidly and with which he makes designs upon glass after the manner of ordinary engravers. The designs are metallic, chatoyant and brilliant, and, by burnishing with a steel tool, they may be even made to have the appearance of metallic inlaid work. The adhesion is absolute. But it is necessary to see that the glass as well as the aluminum point are perfectly clean.

This property of aluminum permits of immediately distinguishing the diamond from glass. While, in fact, aluminum leaves a very apparent trace upon crystals of the latter, it has no action whatever upon the diamond.

Notes on Names.*

"A Good Name is Better than Precious Ointment."

To what ointment the Preacher referred can be but surmised, probably it was the far-famed Basilicon, endowed with regal qualities, now feebly represented by Unguentum resinæ scarce worthy of king-like attributes. A good name, however, being highly prized, and like a virtuous woman, "far above rubies," to correctly accentuate and pronounce it is of importance *per se*—it classifies a man as accomplished, of the *élite*, conversely relegating others to the ranks of the uneducated. The manner in which words are constructed was illustrated in this *Journal* not long since, and it was shown that the study of etymology is both interesting and instructive, a means by which much intrinsic and collateral information is possible of attainment. The highly-trained general public of the present needs not to inquire of the chemist the correct mode of pronunciation, rather has it the ability to repay the compliments of bygone days, but what is it's surprise to hear names pertaining more or less to the business quite erroneously uttered, and with the confidence born of ignorance! Happy he if the astonishment of his patron does not lead to the inference of business incompetence from verbal inaccuracy.

The disease seems to be ingrain, and has arisen from many causes; improper training, bad example, indolence, and self-sufficiency; to eradicate, deracinate, and finely extirpate it much mental cleansing will be required, and like sour ground the mind must be well drained, subsoiled, double-furrow-plowed, and repeatedly cross-harrowed, the which achieved the young student may hope for crops free from weeds and true to name, casting himself free from that slough of despond in which before he sank "from top to toe, from head to foot," freeing himself from the sad condition, where "from the sole of the foot to the head there is no soundness in it."—*Verbum sat sapientum*.

"The nature of the sickness found, Ulysses,
What is the remedy?"

A safe one—to diligently assimilate a few pages of dictionary *nocte manequæ*, or as the fashionable may say *vespere et aurora*; improvement will be rapid and restoration assured. Some effort will be required to regularly imbibe the dose, but as you are not yet enervated, that may be hoped for, *les sages entendent un demi mot*; and although bad habits of indolence and indifference may have made inroads, yet there is time to overcome them before the struggle for life sets in, and the splendid shilling soul absorbing; *sera nunquam est ad bonos mores via*.

Example being better than precept, a few errors in daily use will now be given, *ex uno disce omnes*; vigilance will enable you to cull others. It must be premised, however, that while correctness is to be aimed at, and cannot be wrong, it may not always be exactly right, for in everyday day life pedantry should be eschewed. To illustrate this

one instance will suffice as a guide. When a word is used only in a scientific sense, the rule should be adhered to. Cimolite and Cephælis are of this kind, the initial takes the sound of k or is hard; but hydrocephalus and cephalalgia are now anglicised, and hence amenable to rules of English pronunciation, the soft sound of c is therefore that to use; the same applies to pharmaceutical.

Ch is hard as in chemist, chamomile, diachylon; and is to be similarly pronounced in chalaza, chalcedony, lichen, anchusa, and archil; in colchicum it is customary to give the soft sound, but only through usage, the plant's habitat was Colchis, whence Jason fetched the golden fleece. The following are accented on the first syllable:—spirillum, bacillus, cobalt, dolomite, endosmose, férula, molécule, cérasus. In tragacanth and fungus the g is hard, but in fungi it takes the sound of j. The French word for a daisy and a pearl is marguerite, and the pearly deposit from congealing olive oil is margarín, the g as hard as you please, it is abominable to hear the popular substitute for butter pronounced as with a j, "I pray you avoid it," it jars on the ear. Most students correctly pronounce chlorophyll (to sound like fill), phyllotaxis and phylloxera, and yet persist in saying phy-lode! the rescript is fie! don't do it again. Apropos of the little insect referred to, its correct name is Phylloxera, the e very long; try and educate the public to that, at least adopt it yourselves. Sulphuric and phosphoric acids present no difficulty, but those lower in the scale are sulphurous and phosphorous; H₃AsO₄ is arsenic acid. Most latin words ending in "us" are masculine, but names of trees are feminine, due respect must be paid to rules of grammar, e.g. Prunus domestica, Ficus elastica, Populus alba, Morus nigra, etc. The prevailing trees in Australia are Eu-calyptus, not yew—the nice ear discriminates between the two sounds—nitric acid from nitre is correct, but that from lemon juice is Citric and the synonym of trinitrophenol is called picric acid, so also picr-toxyn, etc. Hydrocarbons of the C_n H_{2n-2} series are acet-ylenes, those of C_n H_{2n} ethylenes. The sound should be preserved in acet-ic acid and eth-er, but in the last the long sound in the initial letter seems to be firmly fixed.

The radical C₆ H₁₁ is am-yl, and the Latin for starch is amyl-um; en-ema and not enéma should be persevered in, the last is in no sense correct. The chemist's workshop is a laboratory where he may also study met-allurgy. The sound of the first syllable in pyramíd, obtains elsewhere, thus pyrotechny, pyr-ology, pyr-ogallol, pyroigneous, pyr-olusite antipyr-ine; pyro, as photographers pronounce it, is quite inadmissible, and must be discarded. From the Latin in-sula we have the Italian is-ola, and from this the word is-olate; iso should be discontinued, it suggests isos equal, with which of course, it has no connection. Alkaloid is correct, not alkaloid; individual alkaloids have the termination distinctly and broadly ine, hence coca-ine, co-caine is atrocious, and betrays absence of all

kinds of knowledge on the subject, and is very slipshod. The familiar nitroglycerine explosive is *dyn-amite*, let the din it creates be mnemonic.

Linen and lint show how Linacæe ought to be sounded, why should there be a difference in ol. lini, sem. lini, etc.? Iridescence has two letters r, and four syllables, Iris has but one r, and Iridacæe is from the flower, not from the quality. Medicines sold under Government stamp are pat-ents, and it is hoped that the explanations herein given are also pat-ent, now that they have been detailed.

Patent Medicine in Germany.*

It will not be surprising to the reader to hear that Germany has also patent medicines, but yet between the patent medicines of Germany, and, for instance, England, there is a considerable difference. That there is such a difference is the consequence of the German patent medicine regulations, which are of a very stringent nature. In England patent medicines are practically protected by the governmental stamp; in Germany the government makes every effort to entirely uproot this class of medicines.

In the first place, secret medicines are not at all allowed to exist. Of each remedy the exact composition must be stated, and the compound must not only contain no poisons in the true sense, but even not have the smallest addition of any drug which is considered as powerful, like opium, calomel, cherry laurel water, chloroform and others.

But this is not the only restriction which exists to the detriment of the patent medicine manufacturers. The patent medicine must not be advertised in the daily press, and the publishers of newspapers are prosecuted and heavily fined if an advertisement appears which is looked on as referring to a patent medicine.

Besides this, the government and the local police and the health authorities do their best by publicly warning people not to use certain patent or quack remedies, which are then officially denounced as consisting of practically nothing which would do any good in curing or improving certain diseases. Further, it is pointed out that the charge of two-and-six pence for instance, is far above the true value of the constituents, and that three pence is about a proper equivalent for the would-be benefactor's (namely, the patent medicine manufacturer's) draught.

The consequence of this is that only galenic preparations, such as cocoa wine, liquorice lozenges, pepsin essences and the like, whose therapeutic effect cannot be denied, appear as patent medicines, together with remedies of old standing, formerly so well advertised that they are still well known and in favor with the general public.

The patent medicine vender has to circularize persons direct by letter or pamphlets to obtain a good sale for his goods, and it is evident from this that it is not alone capital which is required to push patent medicines in Germany,

* From the British and Colonial Druggist.

*E. Lloyd Marks in *The Australasian Journal of Pharmacy* June 20.

but that a lot of details must be observed which will only be known to those who are perfectly familiar with the ins and outs of the regulations on this subject.

How risky it is even for the pharmacist to advertise anything to cure has come under notice only a very few days ago. The recommendation of some cholera drops, consisting of only those drugs which were officially recommended—as hydrochloric acid and port—in a daily paper, had as a consequence an announcement of the public prosecutor, in which the people were warned against this sort of imposture, as no guarantee existed that these remedies would really prevent cholera when administered. Fortunately, in this case, the public prosecutor's superior quashed this indictment, which certainly did the druggist, in the eyes of his regular customers, no good, but threw a certain doubt upon his character.

If we consider what chances foreign patent medicines have in Germany, it will be noticed at a glance that only certain medicines can at all be pushed, as preparations with powerful drugs are entirely excluded, and many of the others want a good deal of judgment as to how they are brought out and made known.

Of course, there is always a certain demand for English specialties, which are asked for not only by Englishmen, but also by Germans, who get used to some of the English proprietary medicines. Many of these are often more in demand in Germany than in their home country. Especially in large towns the "apotheker" keeps a good assortment of English patent medicines, but of course they are not specially pushed by the chemist, but only sold when asked for.

Taking everything in consideration, Germany is not a good field for the British manufacturer of proprietary medicines, as full knowledge of the "Fatherland's" peculiarities is necessary to make an English patent medicine pay over here.

The Manufacture of Milk Sugar.

The skim milk is heated in a suitable wooden or tin tank to about 120 deg. F. To this, for each 100 pounds of milk, one and one-half pounds of aluminum sulphate is added in the forming a hot solution. The curd precipitates at once or in a very few minutes. The clear whey is then separated from the curd by filtering through wire gauze. It is next heated to not less than 180 deg., and about one-fourth pound of powdered chalk to each 100 pounds of milk is added. The excess of alum is precipitated, together with some nitrogenous matter in the whey not precipitated by the first treatment. From this precipitate a perfectly clear filtrate may be obtained, the large part by simply drawing off, the last portion by filtering through duck filters. This clear juice contains sugar, some lime sulphate and still a small residue of nitrogenous matter.

To prevent foaming, which would greatly retard the work or cause a loss

of much of the sugar, a treatment with ground oak bark, or its extract, has been found thoroughly effective. It is indeed believed to be, if not a necessary part of the process, at least one that will greatly facilitate it and diminish the loss. From three to four pounds of ground bark for every 100 pounds of milk is found to be enough. Instead of the ground bark, from two-fifths to one-half pound of commercial tanner's extract of oak bark is more convenient and equally sufficient. Bone black also attains the same end, but it is not recommended on account of the time, trouble and expense of the treatment.

The whey thus purified is boiled in a vacuum pan just as are sugar juices. The crude, almost black product is first boiled to prevent moulding and afterward purified by being redissolved, passed hot over bone-black till it is colorless, and again evaporated to the point of crystallization. The purified sugar must be dry to prevent moulding.

It is estimated that with this method about 65 per cent. of the refined milk sugar in skim milk, or about $3\frac{1}{4}$ pounds of commercial milk sugar per 100 pounds of skim milk can be recovered at a cost of about 13 cents per pound, which might be reduced with experience. The price of milk sugar during the year (1893) is quoted at 12 @ 15 cents. The profit from working 5,000 pounds of skim milk per day, with milk sugar at 15 cents per pound, is calculated at 12.96 and with sugar at 12 cents, 10.37.

It is also believed that with actual experience the yield could be increased and the cost diminished from the figures given above, which are intended for the simplest form of plant, just such as is actually necessary to the profitable conduct of the business on a fairly large scale. The estimates are intended to be entirely safe and to overrate the expense and underrate the profit, rather than the reverse.

Classification of Nuclein and Nucleo-albumin.

The following classification of nucleins and nucleo-compounds, is given by Hammarsten in the *Zeitschrift für Physiologie Chemie*.

Nuclein, to designate, after Kossel, such phosphorus-containing substances as remain in the peptic digestion of complex proteids, which further are compounds of albuminous substances with nucleic acid and yield xanthin-like bases by decomposition.

Paranuclein, to include, after Kossel, nuclein-like bodies which are formed in peptic digestion of simple albuminous substances, but which do not yield nuclein bases. Since these substances differ much among themselves, and are only similar in that they resemble nucleins in certain particulars, Hammarsten suggests that they be called *pseudo nucleins*.

Nucleo-albumin, to include only phosphorus-containing simple albuminous substances, as, for example, casein, which are not compound proteids, and by peptic digestion yield pseudonucleins.

Nucleo-proteids, to include all complex proteids which by peptic digestion yield, besides simple proteids, true nucleins, and give by more profound decomposition nuclein bases. To this class belongs a compound which the author has discovered in the pancreas and calls the pancreatic nucleo-proteid. It is made up not only of nuclein in combination with an albuminous substance, but contains some third part, perhaps animal gum, which, by heating with dilute acids, yields a reducing body. Hammarsten is unable to state the exact nature of this reducing substance, though the evidence favors the view that it belongs to the penta-glucoses. The fact that this complex proteid of the pancreas is capable of yielding a reducing body is of interest in connection with the continuation of glycosuria or diabetes in patients from whom all carbohydrates are withheld for a considerable time, and whose food is hence entirely proteid in nature; it suggests a possible explanation of the origin of sugar from proteid matter.

The Technique of Vaccination.*

Dr. William N. Swift has collected a few statistics in regard to the manner of performing the operation of vaccination in different localities, composed of answers to a list of questions on this subject from the health officers of ninety-nine of the largest cities in the United States and Canada.

As a result of these inquiries Dr. Swift found that twelve cities prescribe rules of procedure for performing the operation; in thirty-nine cities only is it the custom to wash the skin before vaccination, while in only four cities is an antiseptic solution used.

In fifty-one cities it is the custom to vaccinate at one point; in twenty-six cities at two points; in eleven cities at one or two points; in three cities at three points; in one at four points; in one at five points; in one at one to four points; in one at two to five points, and in two the answer was variable.

The cities where it is the custom to vaccinate at one point include Chicago, New York, San Francisco, Philadelphia, Washington, New Orleans, Brooklyn, Detroit, New Haven, Portland, Me., Richmond, Va., Lowell and Lynn, Mass.

It is the custom to vaccinate at two points in Quebec, St. Louis, Milwaukee, Pittsburg, Pa., Worcester, Mass., Savannah, Ga. At three points in Boston, Providence, and Toronto, Canada, In St. Paul, Minn., two to five insertions are made, and at Minneapolis, Minn., five.

In twenty cities no bandage or dressing is used. The statement in regard to the proportion of cases in which septic trouble followed vaccination varied from five per cent. in Allentown, Pa. and three cases in 350, in Newton, Mass., to one case of erysipelas in 30,000 vaccinations in Providence, R. I.

Vaccination in England is controlled entirely by an act of the privy council, and is under the direct supervision of the

* From a paper read before the Massachusetts Medical Society, June 12, 1894 and recommended for publication by the Society.

In Glasgow, Scotland, there are no rules. Washing is only done when plainly needed. No other antiseptic precaution is taken. The lymph is inserted at from twelve to sixteen points. No sepsis is seen except from filth.

An answer from Belfast, Ireland, states that they have no prescribed rules; that it is not the custom of vaccinators to wash the skin. The virus is inserted usually at two points, but frequently at three or four. No bandage is used. Sepsis only comes from gross carelessness and filth.

In Stockholm, Sweden, there are no regulations. They wash carefully. No other antiseptic precautions are taken. Five insertions of lymph are made on each arm. No dressing is applied. They see no sepsis.

In Amsterdam there are no rules. No washing is done or other antiseptic precaution taken except to have clean instruments. The virus is inserted at ten points. No septic infection follows vaccination.

In Antwerp there are no regulations. Washing the skin is sometimes done; usually no other antiseptic precautions are taken. From three to six insertions are made. A dressing is used, cotton with a light bandage. Sepsis is very seldom seen; perhaps one case in 1,000.

In Hamburg the regulations for Germany are in force. Filthy subjects are not treated, but no washing is done. No other antiseptic precautions are taken, except to have aseptic instruments. The lymph is inserted at six points. No dressing is used. Septic infection can only come from impure lymph or from filth coming in contact with the ruptured pustule. Sepsis is very rare. Careful registration is kept of all vaccinations made and the result. The patient is required to report at the end of seven days, and any one who does not report at the end of ten days without sufficient reason is subject to a fine.

In Berlin the regulations for Germany are in force. They sometimes wash the skin with soap and water, and sometimes with antiseptic solutions. They insert the virus at six points. They use no dressing, and see no septic trouble.

In Dresden the German regulations apply. The patients must come with clean arms and clean clothing; otherwise they are refused. The instruments used are sterilized. Three to five insertions are made on each arm. No dressing is used and no sepsis seen.

In Vienna they have the Austrian regulations. The arm is washed with soap and water, and a two per cent. solution of carbolic acid. They insert the lymph at two or three points on each arm, and use no dressing or bandage. No fatal case following vaccination is on record, but a relatively small number of cases of erythema, erysipelas or phlegmonous inflammations occur.

In all the departments in the city of Paris the vaccinating is under the direction of the Institute of Animal Vaccine. Vaccination is always done directly from the heifer to the patient. It is a regular rule in all the Paris schools

that the skin shall be washed. This precaution is becoming little by little a custom with doctors. No other antiseptic precautions are taken. They vaccinate at two points on each arm, use no bandage, and never see sepsis.

In Lisbon there are no rules. They seldom wash the skin and no antiseptic precautions are taken. The virus is inserted at three points on each arm. No dressing is used, and septic infection is rarely seen.

In Rome the regulations for Italy are in force. The skin is not usually washed, and the only antiseptic precaution is to use clean instruments. They vaccinate at two points on each arm. Usually no bandage is used, but sometimes a gelatine plaster is applied. At the time of the popes, when the humanized virus was used, syphilis was not uncommon. Now that animal lymph is used no bad results are seen. Careful records are kept of the results of vaccination. The whole matter of supplying lymph is in the charge of the National Vaccine Institute. One regulation is that no one shall be allowed to use vaccine lymph that is more than ten days old.

The author summarizes his conclusions drawn from the consideration of the result of the inquiry as follows:

Vaccination should be done with the same care as any minor surgical operation. The skin should be carefully washed with soap and water.

The vaccine lymph must be fresh, certainly not more than one week old.

The virus should be inserted at more than one point. The point of inoculation should be kept perfectly clean throughout the whole course of the disease, and protected from friction. The patient, meanwhile, should be considered as suffering from a mild disease.

My observations show that public vaccination in this country is not, as a rule, done as it ought to be. The question of a proper technique for vaccination is a matter of very great importance, and the whole subject needs careful investigation and revision.

Correspondence.

Roots and Herbs to Sell.

Editor AMERICAN DRUGGIST:

I would like to find out who deals in or buys roots and herbs. I could gather and ship quantities of boneset, pennyroyal, sumac, lobelia, gold-thread and perhaps some other descriptions if there should be money enough in it to pay. Can you help me any in the matter?

GEO. M. SAWYER.

SCHROON LAKE, N. Y.

Lanolin for Gonorrhoea.

Dr. Stern proposes lanolin as an addition to injections. He employs the following formulæ:—

- 1.—Lanolin, anhydr. 3 vj
Ol. amygdal. dulc. f 3 iiss
- 2.—Zinci sulphat. gr. viij
Lanolin, anhydr. 3 v
Aque. f 3 j
Ol. amygdal. dulc. f 3 iiss
- 3.—Acid. salicylic. gr. iv
Ol. amygdal. dulc. f 3 iiss
Lanolin anhydr. f 3 vj

The first is used in the very acute stage, on account of its antiphlogistic action, allowing it to remain five or ten minutes in the urethra; on the eighth or tenth day, an antiseptic or astringent may be added, the treatment being ended by an aqueous solution of resorcin ($1\frac{1}{2}$ per 100).

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Phosphoric Acid Spots.—B. L. O'D. writes: "Please tell me what I must use to remove phosphoric acid spots from marble."

We fear there is no remedy for this except re-facing the stone. The application of chalk and water followed by turpentine containing a little beeswax in solution will improve the appearance somewhat, but as stated above, the best remedy is re-facing.

Lydia Pinkham's Compound.—W. E. L.—A recent formula gives this compound the following composition:

Viburnum opulus.....	1 lb.
Gaultheria.....	1 lb.
Poplar bark.....	$\frac{1}{2}$ lb.
Chamaelirium (false unicorn root).....	$\frac{1}{2}$ lb.
Cassia.....	$\frac{1}{2}$ lb.
Trillium (bethroot).....	6 ounces.
Sugar.....	6 lbs.
Alcohol.....	$\frac{1}{2}$ gallon.
Water.....	a sufficiency.

To two and one-half gallons of an infusion prepared from the drugs in about No. 40 powder, and filtered, add the sugar; agitate until dissolved, then add the alcohol.

Kitchell's Liniment.—C. E. H.—This is said to consist of a weak solution of ammonia as follows:

Ammonia water.....	1 part
Water.....	3 parts
Caramel.....	a sufficiency

Mix.

Pinaud's Brilliantine.—F. E. E. H.—We are unable to furnish a formula for the above. A preparation of equal value may, however, be compounded by mixing together equal parts of glycerin and castor oil and flavoring with oils of bergamot and lemon. The following proportions will be found useful:

Glycerin.....	8 ounces.
Castor oil.....	10 ounces.
Oil of bergamot.....	1 dram.
Oil of lemon.....	1 dram.
Oil of neroli.....	$\frac{1}{4}$ dram.

Incorporate the flavoring oils with the castor oil, add the glycerin and shake.

Does Syrup of Wild Cherry Decompose Ammonium Carbonate?—J. C. B. sends the subjoined prescription with a query as to whether the acids in the syrup of

wild cherry, as HCN or tannin, exercise any effect upon the ammonium carbonate:

Ammon. carbonate.....	3 iss
Ammon. chloride.....	3 i
Tinct. aconite.....	gtt.xx.
Syrup ipecac.....	3 iss
Syrup scogga s s }	
Syrup wild cherry, q. s. ad.....	3 ii

He writes to say that in compounding the above a fall of temperature is noted and effervescence takes place when the mixture is allowed to stand. The effervescence produced is brisk and sufficient to cause an explosion if the bottle is corked. He has substituted mist. glycyrrhizæ comp. for the syrup of wild cherry, but the effervescence complained of takes place, just the same.

The trouble in this case comes from the syrup of ipecac, which contains acetic acid, which reacts with the ammonium carbonate to form ammonium acetate with the liberation of CO₂.

Effervescence can be prevented by neutralizing the syrup of ipecac with a few drops of ammonia water before adding the ammonium carbonate.

Syrup White Pine Compound.—M.D.L. asks for a practical formula for "syrup white pine compound" to take the place of some of the proprietary articles.

The appended formula is a modification of the "Syrup White Pine Compound" of the manufacturing pharmacist and it furnishes a very satisfactory syrup:

Balm Gilead buds }	
Spikenard }	5 1/2 ounces
Blood root.....	
White pine.....	30 ounces
Wild cherry.....	40 ounces
Ipecac.....	4 ounces
Sassafras.....	5 1/2 ounces
Morphine acetate.....	5 drams
Chloroform.....	5 1/2 ounces
Alcohol, 1 part }	
Water, 5 parts }	q. s.

After twelve hours' maceration of drugs reduced to coarse powder, percolate with above menstruum to 24 pints. In this dissolve 24 pounds sugar by percolation and add 1/2 gallon confectioner's glucose. Dissolve morphine in 8 ounces of water and add sufficient acetic acid to remove turbidity. Mix with syrup, add the chloroform and agitate well; add lastly enough simple syrup to make 40 pints. If combination with tar is thought desirable, 1/2 ounce of N. F. glycerite of tar can be added to each pint.

Sanford's Library Paste.—W. W.—We do not know the composition of this paste, but a preparation practically duplicating it may be made as follows:

Rice starch.....	1 ounce.
Gelatin.....	3 drams.
Water.....	8 fl ounces.

Incorporate the starch powder with the water, add the gelatin and heat gently over a water bath until a jelly-like compound results. Keep the paste in a tight bottle with a few drops of oil of cloves.

Artificial Strawberry Essence.—C. G. V. writes: "Please publish a formula for essence of strawberry made from the ethers."

The following is the formula usually employed:

Nitric ether.....	Parts.
Methyl salicylate.....	1
Ethyl formate.....	1
Amyl butyrate.....	2
Amyl acetate.....	3
Glycerin.....	5
Ethyl acetate.....	5
Ethyl butyrate.....	5

Bibliography.

LESSONS IN QUALITATIVE AND VOLUMETRIC CHEMICAL ANALYSIS for the use of physicians, pharmacists and students, by Dr. Chas. Curtman, 4th edition, St. Louis, 1894.

Curtman's well known translation of Beilstein's Chemical Analysis which first appeared in 1883, has been expanded in successive editions until now in the fourth it has become a book of some 295 pages and can scarcely be considered as a translation, embracing as it does so much original matter. This expansion has been undoubtedly in the direction of improving the book. The translator and editor has judiciously added to the examples for practice in qualitative inorganic analysis, the tables for systematic examination of unknown substances enlarged and a section on reagents added which corresponds in part to the similar action of the U. S. Pharmacopœia. Dr. Curtman then continues Beilstein's plan by giving a number of examples for practice in qualitative analysis of organic substances, including some of the newer synthetic remedies and the more important alkaloids. Volumetric analysis is then very well covered as it concerns the pharmacist or the medical man. In fact the needs of the latter are very well considered in the full sections on the examination of urine, examination of drinking water, of bile, urinary sediments, calculi, etc. Several full page plates of urinary sediments and micro-organisms as seen under microscope are also appended. The book is certainly a handy and useful little manual in its present form, and merits its continued success.

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Questions; Third Series.

21. The usual dose of eriodictyon is from 15 to 80 grains.

22. The usual dose of ergot is from 15 to 40 grains.

23. The usual dose of rhus glabra is from 15 to 60 grains.

24. The usual dose of chestnut leaves is from one half to two drams.

25. To convert from one thermometric scale to another, F meaning Fahrenheit, R meaning Réaumur and C meaning Centigrade or celsius scale, proceed as follows:

ABOVE FREEZING.

To convert F into C.— $\frac{F - 32}{9} \times 5 = C$.

To convert C into F.— $\left(\frac{C}{5} \times 9\right) + 32 = F$.

To convert F into R.— $\frac{F - 32}{9} \times 4 = R$.

To convert R into F.— $\left(\frac{R}{4} \times 9\right) + 32 = F$.

BELOW FREEZING.

To convert F into C.— $\frac{F + 32}{9} \times 5 = C$.

To convert C into F.— $\left(\frac{C}{5} \times 9\right) - 32 = F$.

To convert F into R.— $\frac{F + 32}{9} \times 4 = R$.

To convert R into F.— $\left(\frac{C}{4} \times 9\right) - 32 = F$.

FOR ALL DEGREES.

To convert C into R.— $\frac{C}{5} \times 4 = R$.

To convert R into C.— $\frac{R}{4} \times 5 = C$.

27. Beeswax (50 grs.) cannot be weighed in water because of its being lighter than water. Specific gravity of wax about 0.950. The process for finding specific gravity may illustrate the fact.

	Grains.
Weight of wax.....	50.50
" " " attached to a copper.....	132.39
Immersed in water, the whole weights.....	79.00
Weight of water equal in bulk to wax and copper.....	68.50
Weight of copper in air.....	88.50
" " " " water.....	78.50
" " equal bulk of water.....	10.00
" " bulk of water equato wax and copper.....	68.50
Weight of bulk of water equato copper.....	10.00
" " " " " wax alone.....	52.50

Therefore specific gravity = $\frac{50.00}{52.50} = 0.952190$

28. 1 cubic foot of hydrogen weighs 87.-0801 grains, air is 14.44 times heavier than hydrogen. 1 cubic foot of hydrogen = 87.0801 \times 14.44 = 584.71464 grains of air. 1 lb. = 7000 grains. 75 lbs. = 7000 \times 79 = 558000 grains 558000 + 584.71464 = 1034.1964. cu. ft. of hydrogen.

29. Ether, specific gravity = 0.750; chloroform, specific gravity (pure) = 1.490, specific gravity of mixture of equal parts = 1.120; 100 ozs. at 1.12 specific gravity (according to Dr. Lyon's Table) = 85.78 fl. ozs. Then 200 ozs. at 1.12 specific gravity (according to Dr. Lyon's Table) = 85.78 \times 2 = 171.46. fl. ozs. or 1.8995. gallons of mixture.

Names of Students Whose Grade Stood 75 on the Third Series.

H. J. Barber, Alton, Ontario, Canada.
John W. Brewer, Lake Preston, So. Dak.

Frank Hartman, Middletown, Conn.
Chas. J. McCloskey, Jersey City, N. J.
W. A. Sichel, Snowshoe, Pa.
C. P. C. Timberman, Alexandria, Va.
A. D. Townsend, Randolph, Neb.

Questions; Sixth Series.

BOTANY.

51. Describe a dotted duct and mention some wood in which dotted ducts occur.
52. What are scalariform ducts?
53. Describe the structure of stoma and state their function in the life of the plant.
54. What is the common name for setae?
55. What is crude sap and what is elaborated sap?
56. What is the composition of the tertiary and of the quaternary nutritive matter elaborated by sap?
57. What is the function of starch in the plant?
58. To which class of nutritive compounds do the fixed oils belong?
59. Name the principal kinds of vegetable acids, giving the main source of each.
60. In what part of the plant are the alkaloids mostly found?

Student's Column.

Organic Materia Medica of the U. S. P.

[Continued from page 205.]

Geranium. Cranesbill; spotted geranium.
 BOTANICAL NAME.....*Geranium maculatum*.
 NATURAL ORDER.....*Geraniaceae*.
 HABITAT.....Canada and Northern United States.
 CONSTITUENTS.....Tannin, gallic acid, and a crystalline principle soluble in alcohol.
 PROPERTIES.....Astringent, styptic and antiseptic.
 PART USED.....The rhizome.

Dose.—Fld. Extract Cc. 2—8.

Glycyrrhiza. Liquorice.
 BOTANICAL NAME.....*Glycyrrhiza glabra*, var. *glandulifera*.
 NATURAL ORDER.....*Leguminosae*.
 HABITAT.....Southern Europe, Northern Persia, Afghanistan, Southern Siberia, cult. in Spain, France, Italy and Southern United States.
 CONSTITUENTS.....*Glycyrrhizin* (ammonium salt of *glycyrrhizic acid*) *glycyramalm*, starch, asparagin, albumen, etc.
 PROPERTIES.....Demulcent and laxative.
 PART USED.....The root.

Dose.—Fld. Extract Cc. 0.60—1.20; Ext. Pur. Gm. [0.60—1.20; *Glycyrrhizin*. Ammom. Gm. 0.30—0.60; Ingredient in Pulv. *Glycyrr. Comp.*

Gossypii Radicis Cortex. Cotton root bark.
 BOTANICAL NAME.....*Gossypium herbaceum*.
 NATURAL ORDER.....*Malvaceae*.
 HABITAT.....Asia, Africa, America.
 CONSTITUENTS.....Starch, resinous substance, fixed oil, tannin.
 PROPERTIES.....Emmenagogue and oxytoxic.
 PART USED.....The bark of the root.

Dose.—Ext. fld. Cc. 2—4.

Gossypium Purificatum. Purified cotton; absorbent cotton.

BOTANICAL NAME.....*Gossypium herbaceum*.
 NATURAL ORDER.....*Malvaceae*.
 HABITAT.....Asia, Africa, America.
 PROPERTIES.....Use as a dressing for wounds to exclude air, and in the preparation of pyroxylinum.
 PARTS USED.....The hairs of the seed deprived of fatty matter.

(To be continued.)

The Westchester County Pharmaceutical Association have arranged to hold their next quarterly meeting in New York City. It is proposed to meet October 10 at 1 o'clock P.M. at the New York branch of Parke, Davis & Co., Maiden Lane. The members will be shown over the different departments and lunch will be served. The association will also inspect the laboratories of Dr. E. R. Squibb & Sons, 86 Doughty street, Brooklyn.



Written for the
 American Druggist and Pharmaceutical Record.

PROFITABLE CLEANLINESS.

THE ADVERTISING VALUE OF AN ATTRACTIVE STORE OR OFFICE—THE MONEY-LOSING, DARK, AND DIRTY PLACE OF BUSINESS.

BY NATHANIEL C. FOWLER, JR.

The regular advertisement in the regular newspaper is the bottom of all advertising.

The well-printed circular and the comprehensive catalogue have their place in the economy of advertising.

The poster, the painted rock, the chromo, are valuable to the advertiser.

The advertising that does not harmonize with the business is worth nothing.

The business that does not harmonize with the advertising wastes all the money it spends in advertising.

In good harmony is good profit and good business.

A big advertisement, written by the best advertisement writer, set by the most skillful compositor, and appearing in the leading medium or mediums of business or place, will bring to the store many would-be customers, but the advertisement will not sell the goods; that is the business of the store, the clerks and the quality of the goods.

Ninety per cent. of the failures in advertising have been because the advertiser expected his advertisements to do the selling; he depended upon advertising, unsupplemented by proficient salesmen, attractively arranged goods, and conveniently located place of business.

The appearance of a store has as much to do with successful business as has the advertising, the goods or the clerks.

A diamond is a diamond in any market, but place it in a box of sawdust, in a dark corner of a store and the would be purchaser, unless he be an expert in diamonds, won't buy it for less than 75 per cent. discount.

A wagon is worth its price anywhere, and is just as good a wagon with cobwebs between the spokes and dust on the cushions, but you can't sell it for as good a price.

A fly-specked electrical battery will ring just as many bells, but it won't sell well. Folks don't like dirty glass.

Dress goods are dress goods, and will wear just as well in the dark as in the light, but the woman buys them to wear in the light, and they must be shown her in as attractive a way as they

will look when properly made up and put on her.

A little elbow grease will make a stove worth 25 per cent. more.

A lot of tobacco pipes mixed up together, looking like a job lot, will sell for only half the money the same pipes will, if set apart, each kind by itself, and given show-room prominence.

A dirty collar is worth less than no collar at all, and yet I have had men's outfitters hand me soiled collars from a box. It's a little thing, but many a man may take his trade away from a house which does not deal in cleanliness.

A house is just as comfortable, and worth just as much, with long grass on the lawn, and two or three dollars will cut the grass, and the prospective buyer may take the next house.

The appearance of anything to be sold has as much to do with the sale as the actual intrinsic value of the article itself.

It is just as essential, so far as selling is concerned, to have the package clean as to have the goods inside clean.

There is many a drug store with a dirty fountain, and yet the syrups are as pure as can be, and the glasses always bright, but the dirty fountain makes people think that the syrups are dirty, that the glasses are dirty, that everything is dirty, and if the public think so the man must clean up his fountain if he wants to sell soda.

You can wash the fly specks off of a hair brush, and you had better wash them off before you try to sell it.

Light and cleanliness are the two great essentials to selling.

A dark store is never as profitable as a light one.

Daylight is free to everybody, and many a store can be made light by knocking a few more holes in the wall.

If the retailer is so unfortunate that he can not light his store naturally, let him light it artificially.

No one yet has failed in business because he spent too much money in lighting his store.

Light doesn't cost a great deal.

Keep the store light all the time, in dull times and in good.

Don't economize in gas by turning up the lights in any particular corner only when somebody happens to come into that corner.

People are like flies, they don't generally go into dark places.

Folks are attracted by light.

Darkness doesn't cover up a multitude of business sins.

Folks think they see unseen dirt in a half-lighted store.

Successful stores are always light.

I have yet to find a first-class, progressive, and profitable business run without plenty of natural or artificial illumination.

The man who keeps a dark store himself will not allow his wife to buy anything from a similar store.

In these modern times it would seem absurd to discuss the common-sense doctrine of profitable light and cleanliness, and yet while everybody knows that cleanliness should be a part of business, and that light should be everywhere, one-half of the store-keepers attempt to do business in dark stores, and fully one-half of this half do not give the attention to business cleanliness which they insist that their wives shall give in the management of the household.

Do not fool yourself by thinking that disorder is a mark of genius.

Do not try to convince the public that your business is so solid that you can do as you please.

There never was a man free to do as he pleased. You have got to do as others want you to, or do no business at all.

A dirty, ragged clerk can sell goods, but a well dressed clerk, who isn't a dude, can sell more.

A poor but well-brushed suit of clothes, with a clean collar and a pair of polished shoes, on a clerk have almost as much to do with the selling quality of that clerk as has the ability of the clerk.

Do not make the mistake that some store-keepers do, of having the front of the store light, bright, clean and attractive, and the back of the store like the inside of a cave.

Cleanliness costs little.

Shoe blacking and clean collars are inexpensive.

Dusters and brooms don't wear out very rapidly.

Soap is cheap and water costs nothing.

Sunlight is free, and artificial light doesn't cost much.

But even if they cost a great deal, it is better to put out more money and do more business than to cut expenses and do less business.

Some folks believe that in economy is the success of business, that what you save is as important as what you earn—and they are right. But the successful business man, in not forgetting to save, figures that what he makes has as much to do with his success as what he saves.

It is better to put out \$1,000 and take in \$2,000 than put out \$500 and take in \$1,000.

Everybody knows that profit is the difference between expenditure and receipt, and yet fully one-half of the business men make more effort to cut down expenses than to increase business.

The soap agitation in Germany reminds the *Westminster Gazette* of Mark Twain's letter: "Monsieur le Landlord.—Sir: Pourquoi don't you mettez some savon in your bedchambers? Est ce que vous pensez I will steal it? . . . Mais nous ne pouvez pas play this savon dodge on me twice. Savon is a necessary de la vie, to anybody but a Frenchman, et je l'aurai hors de cet hotel or make trouble. Allons."



NEW YORK.

Charles Orlando Rano, Ex-president of the New York State Pharmaceutical Association, was a visitor to the city last week.

Kilborn's pharmacy on Fifth avenue, near Fifth street, Brooklyn is one of the

J. Diner has purchased the store of F. W. Petrie at 112 Manhattan street. The store is a very attractive one, and Mr. Diner is well satisfied with the outlook for business.

Harry Heller, the genial secretary of the Alumni Association of the N. Y. C. P.,



Geo. J. Seabury.

A possible candidate for Mayor of New York.

There is a likelihood from the present indications that George J. Seabury will be put forward by the New York Republicans as a candidate for mayor. Overtures have been made to him with this end in view, and as it is highly desirable that a business man of unblemished reputation should be placed in nomination for this high office, the selection of George J. Seabury, who has distinguished himself in war, science, and in politics, is in every sense admirable.

Mr. Seabury has the honor of being one of the famous Republican "Committee of Thirty," that organized and enrolled nearly 50,000 Republicans in the city and county of New York into a solid phalanx by election districts. They performed a herculean and phenomenal task. He has demonstrated the fact that he is a natural born organizer. Many national and State organizations will cheerfully recommend him to successfully accomplish such work.

Mr. Seabury won an honorable and national reputation as an author and writer on economic, commercial and public problems. He has also consulted the muse. Critics have praised his occasional poetic compositions, notably his "Ode on the Black Bass," that found admirers throughout the piscatorial world, as a work worthy to be classed with that of old Isaac Walton.

In the advancement of pharmacy in its legislative, educational and commercial aspects Mr. Seabury has been an aggressive factor, and his influence is felt in the national association; many friends both in and out of the trade would hail his nomination with genuine pleasure and his election would be assured.

Mr. Seabury has always been popular and is a leading citizen of New York City. If he consented to run he would have the support of his own organization, Independent and Reform Democrats, Good Government Clubs, National Guardsmen, Veterans of the War, the Masonic Order and Boards of Trade.

handsomest stores recently opened in the City of Churches.

F. A. Lowe has disposed of his interest in the firm of Brownell & Lowe, Orange, N. J. The business will be conducted hereafter by F. E. Brownell alone.

has become the proprietor of the pharmacy at 157 Seventh avenue, formerly managed by J. Salm.

Joseph Johnson, of 53 Oak street, who was arrested while trying to sell stolen drugs to James Brannigan, a druggist of

119 West 67th street, was held for trial in \$2,500 bail at the Yorkville Police Court yesterday.

James M. Smith, for many years chief clerk at the Manor Hall Pharmacy, at Warburton avenue and Dock street, Yonkers, has purchased a store at Cornwall-on-the-Hudson and opened it on Labor Day.

The annual meeting of the Erie County Pharmaceutical Association was held at Buffalo Sept. 4, and demonstrated that the organization is as lively as ever and has advanced materially in strength during the past year.

The election of officers resulted as follows: President, Neil McEachren; first vice-president, Geo. H. Paddock; second vice-president, Dr. Emil Lustig; secretary, P. S. McArthur, and treasurer, E. J. Liebetrut. At the close the following new members were elected into the association: Robert E. Jones, Hugh A. Sloan, H. C. Rider, T. V. Bauer, C. W. Tuerke, F. M. Lyman, Howard Wade, A. B. Hollan. This makes 113 members in the association.

The Drug Trade Club was formally opened by a luncheon in the club rooms at 52 Cedar street on Saturday afternoon September 15. After discussing a well served luncheon President Geo. B. Hillier made a brief address. He was followed by Jesse L. Hopkins, Chas. Henning, C. G. Euler, Caswell A. Mayo, Ed. Wells and several other members who made brief speeches.

In the drug stores realism is quite as conscientiously practised. The head, neck and arms of a beautiful blonde young person are cut out of cardboard. In one hand is a tube of Blanks' Best Tooth Paste or Mme. Annabella's Incomparable Beautifier. A joyful expression illuminates the cardboard lady's face, and her whole appearance gives weight to the advice printed on cards beneath her: "Use Blank's Best Tooth Paste and have teeth like pearls," or "Do not fail to use Mme. Annabella's Incomparable Beautifier and have cheeks like roses."

Mrs. Anna H. Good, wife of Brent Good, died in this city some two weeks since. Mrs. Good was a daughter of Henry I. Hoyt, of Norwalk, Conn. Mrs. Good had been an invalid for about two years, and spent the greater part of the time traveling for her health. Notwithstanding her illness, she found time to interest herself to a certain extent in society, and was exceedingly interested in all charitable church work and a liberal contributor. She was also an able supporter of the Society of the King's Daughters, and very generously assisted in the maintenance of several homes and institutions in New York.

Milton F. Schaack of Lancaster, Pa. who graduated from the Philadelphia College of Pharmacy in 1891 and who has lately been clerking at Spear's pharmacy on One Hundred and Twenty-fifth street in this city, has decided to pursue a University course in chemistry and will sail next month for Germany. Mr. Schaack has made some interesting contributions to pharmaceutical literature, the latest of which consisted of a report on an examination of commercial preparations of iron phosphate with alkaloids. This article appeared in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for April 12th of this year, page 187.

Lawyer Charles Strauss, of 237 Broadway, has begun suit in the Supreme Court in behalf of the Iron Malt Chemical Company, to enjoin Charles F. Morrison, Jr.,

a druggist of 351 Fulton street, Brooklyn, from using the bottles of a tonic manufactured by the Iron Malt Chemical Company, to hold a preparation manufactured by the defendant. The Iron Malt Chemical Company's suit is based upon the affidavits of Adam M. Jones and James B. Ryan, who were formerly in the employ of Morrison. This is the first of a series of suits against many druggists who are using bottles belonging to the complainants in the same manner.

The National Distributing Co., which is to compete in the distribution of whiskey with the American Distributing Company, was incorporated with the Secretary of State at Albany, September 20. The company's objects are to buy, sell, deal in, store, rectify or redistill alcohols, gins, whiskies and all similar and other articles and things relating or incidental to general distilling of liquors and spirits. The business is to be located in New York



Henry Canning.

President of the Interstate Retail Druggists' League.

city and in such other places as may be agreed upon. The capital is \$100,000 divided into 1,000 shares, and the directors are Chas. Putzel and Peretz Rosenberg, each of whom subscribe for 450 shares of the stock; Max Rayser, 50; Emil Salinger, 5, and Gustav Putzel, 45, all of New York.

Dr. H. B. Harding of Humphreys' Homoeopathic Medicine Company in an interview with a New York Times' reporter says: "We are very sensitive to any general movement in business, one way or the other. We have 40,000 agents for our specifics, scattered all over this country and the world, and when a period of general depression comes, and each one of our thousands of agents contract just a little on the size of the stock he carries, we feel it quickly. There has been a general shrinkage in the stock of our agents during the period of depression. But we have felt a decided improvement

since the tariff question was settled. Orders have been pouring in on us from Maine to California. That is a convincing sign to us of the return of business prosperity. The general belief is that the consumption of cheap medicines increases in hard times. We look for a very active movement in trade from this time forth. There is a sort of 'boom' now, but we do not know how long it will continue. It is my judgment that the revival will be general and steady. Our veterinary medicines were the worst sufferers by the depression. Horses are a luxury."

Don't miss the League Mass Meeting in Mott Memorial Hall October 3.

Kings County Pharmaceutical Society.

The September meeting of this Society was held on Tuesday, the 11th inst., with President L. T. Perkins in the chair. The Committee of Supervision of the College reported 88 matriculations to date for the junior class.

The pharmacy committee took up the subject of adulterations and gave some interesting facts in relation thereto.

The Society voted to have a question box at each meeting. Through this box any member wishing information upon any subject concerning pharmacy may send questions to the pharmacy committee, who will endeavor to give the desired information at the next meeting.

The pharmacy committee are F. H. Pamphilon, 201 Fourth avenue; John Pfeiffer, 241 Nostrand avenue; and A. P. Lohness, 1076 Bedford avenue.

Mr. Pfeiffer and Dr. Bartley, of delegates to the A. P. A., gave a brief report of the meetings of that body.

Mr. Alt, of delegation to the New York State Association, was unable to be present, but sent a note, accompanied by a framed photograph of the members of the delegation who visited Mr. McGregor.

Mr. Pfeiffer wished some action taken by the members that would bring the preparations of the National Formulary to the notice of the medical profession. Upon motion the Committee on Revision of Pharmacopoeia were requested to present samples of such preparations at the next meeting. The legislative committee were requested to find out and report at that meeting how the Assembly men from Kings County voted upon the telephone measures, introduced in the legislature of last session.

The alcohol question was discussed and a letter read from secretary Carlisle, which indicated that alcohol would be no lower until another session of congress, at least.

The society voted to defend any member, who may be prosecuted for selling Bromo Seltzer, on the ground of infringing the rights of the proprietor of bromo-caffeine.

The prospect for a large junior class in the college for this year was thought to be very favorable.

Mass Meeting of Druggists.

An interesting meeting of the New York branch of the Interstate Retail Druggists' League was held at their rooms in the Mott Memorial Hall, 64 Madison avenue, Friday, September 21.

An unexpected visitor was there in the person of President Canning, of Boston, who came on to take part in the discussion relative to the projected mass meeting of the retail druggists of New York.

The meeting was convened by Mr. Rontey, who requested C. A. Osmun to act as secretary, in the absence of Mr. Morrison. President Canning was then introduced and addressed the members.

Mr. Canning had looked for a larger attendance and was somewhat disappointed with the slimness of the gathering. He had seen a card announcing the meeting, and but for this would have been unaware of the fact that the branch was to hold a meeting prior to the Convention of the N. W. D. A. He had come prepared to address the local members on several subjects of importance and had anticipated a good attendance, especially in view of the fact that this was the last meeting prior to the wholesale druggists' convention. He confessed to a feeling of discouragement at the small number present. Launching into the subject of discussion, he spoke of the encouraging progress which the League had made in the New England States. Organization had been effected from Maine to Connecticut. New York was needed, however, to make the

New York and Brooklyn. He had the canvassers all ready and it only remained for the New York branch to say whether they should come on or not. He wished to see the New York branch a branch commensurate with the size of the metropolis.

Concluding his address, Mr. Canning questioned the members present as to whether New York could or could not be secured for the League. To this Mr. Rontey made reply that he could offer Mr. Canning little encouragement. He had sent out between four and five hundred postal cards and the attendance present spoke for the response.

Mr. Canning said a great advantage would be gained to the retail druggists of the whole country if a large meeting could be secured during the convention of the wholesale druggists. He had pictured in his mind a mass meeting of retailers, to which the jobbers and wholesalers could be invited, and said it would be well worth trying to bring about such a meeting.

Mr. Osmun spoke at this point and reminded the members that they were figuratively at the present time in front of a very broad ditch and something should be accomplished. He thought Mr. Canning's offer should be accepted.

The treasurer, Mr. Bender, expressed the opinion that if 80 per cent. of the trade in New York could be induced to join the League they would speedily have the proprietors and dealers on their knees.

After some further discussion, it was finally agreed to accept Mr. Canning's offer to send representatives of the League to canvass New York and vicinity, and arrangements were made whereby the visiting delegates will have the assistance of several local members in visiting the trade in this city and Brooklyn.

The delegates, consisting of F. W. Reeves, G. W. Cobb, N. W. Stiles and C. A. Charles, will leave Boston on Wednesday evening of this week and commence work in the city and vicinity on Thursday, September 27.

Before the meeting adjourned arrangements were made to hold a mass meeting of the retail druggists of this city and Brooklyn on Wednesday, October 3, at 8 P. M., in the Mott Memorial Hall, 64 Madison avenue.

As it is the purpose of the League to confer on this occasion with the members of the Association of Manufacturers and Dealers in Proprietary Articles, as well as the N. W. D. A., it is hoped that members and non-members alike will turn out in large numbers.

On motion of Mr. Osmun, Mr. Canning received the thanks of the local branch for the zealous interest which he has manifested in their affairs. The meeting then adjourned until the first Friday in October.

National Wholesale Druggists' Association.

The Committee on Passenger Routes and Rates for Delegates to the annual meeting of the N. W. D. A. at New York October 1, report that they have arranged for a uniform rate of one and one-third fare to New York and return from all points in the United States, except some portions of the far West, from which sections there will not be enough delegates to secure a reduction in the rates.

The various traffic associations will notify each office where tickets are sold in regard to these excursion rates. It will be well for those intending to take advantage of them to make application a little

in advance and see that everything is all right, though in the event of any delay in the reception of proper notice the matter can be investigated and rectified by the committee. Additional particulars in regard to these excursion rates can be had of any railroad office, or will be furnished by the committee upon application.

Parties attending, who wish to avail themselves of the benefit of these reductions, must purchase a full-fare ticket to New York, and at the same time secure a certificate from the agent from whom they purchased their ticket, which will entitle them, after it has been properly stamped and indorsed by the Secretary of the N. W. D. A., to secure return transportation at the reduced rate.

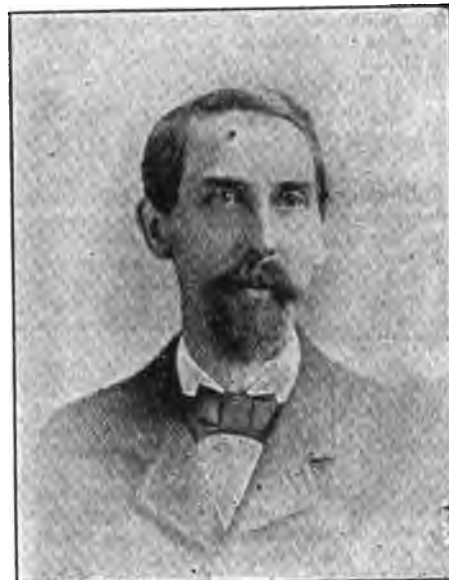
The Committee of Arrangements and Entertainment for the meeting of the Association to be held in New York, announces in a circular under date September 8, that October 1st to 5th, 1894, has been fixed as the date of the convention, the first session being held at 8 P. M. on Mon-



N. W. Stiles,
Organizer for the Retail Druggists' League.

organization truly national. To aid in the work of bringing New York into line, it had been decided to send four representatives of the League to canvass this city and Brooklyn. It was recognized that it would be a hard matter to bring about complete organization in New York; but New York is the pivotal center and the whole of the country might be organized, and without this city nothing could be gained. He could not account for the apathy which seemed to characterize Gotham druggists in the matter of organization for the maintenance of prices. The "rank and file of the druggists do not seem to understand the full import of the League's work," he said, "but as soon as the druggists could be induced to come out and meet the conditions would change."

Speaking of the success which had attended the efforts of the League organizers in Vermont, he said it had been such as to induce them to try similar experiments in



Geo. W. Cobb,
President of the New England Druggists' Union
and Organizer for the League.

day, October 1. There will be morning and afternoon sessions on Tuesday, Wednesday and Thursday, making seven sessions in all, which the committee believes will be ample for all of the business of the Association, besides allowing the time necessary for two sessions of the Proprietary Association which have been appointed for Tuesday from 9 to 11 A. M. and Wednesday from 4 to 6 P. M.

All of the business meetings, as well as the president's reception, which will take place on Tuesday evening, and the banquet on Thursday evening, will be held at Delmonico's, Fifth avenue, Twenty-sixth street and Broadway. The entire second floor, including the large banquet hall, has been engaged by the committee for the whole period of the convention, and affords ample rooms for committees, and for all of the business and social purposes of the meeting.

There will be no evening sessions except Monday, the other evenings being occu-

pied by the social features of the programme, to which the committee has given special attention without in any way overlooking the more important objects of the convention.

The entertainment specially provided or the ladies in attendance, will be such as to very well occupy their time during the days as well as the evenings, and it is the hope of the committee that this provision will be enjoyed by a larger number than has attended any previous meeting.

The convention will close on Friday with a steamboat excursion to the Atlantic ocean and about the harbor.

In fixing the date of the meeting the committee has been influenced by the fact that the convention of the National Paint, Oil and Varnish Association occurs at Boston during the week following, and as many of our members are also members of that organization, it was deemed desirable that the meetings should be so arranged as to permit them to attend both.

The headquarters of the association will be at Delmonico's, but in order to have the members together as much as possible, the committee has arranged to room such members as have no other choice, at the Imperial Hotel, 32d street and Broadway, and the Brunswick, Fifth avenue, 26th and 27th streets.

New York State Board of Pharmacy.

Following is a list of the successful candidates at the September meeting of the State Board:

J. M. Lotridge, Cincinnati; William D. Hill, West New Brighton; Edwin Wollcock, Poughkeepsie; M. B. Riddell, Luzerne; Arthur E. Bailey, New York City; Charles H. Gaus, Albany; D. M. Sullivan, Oswego Falls; Charles S. Scott, Goshen; A. D. Howell, Buffalo; W. J. Bowman, Pine Plains; John D. Fisher, New York City; Paul Renfe, New York City; J. J. McLaughlin, New York City; George T. Getman, Lyons; Henry E. Graf, Lyons; Seth A. Mereness, Carlisle; E. A. Sawyer, Whitehall; E. L. Fitch, Brookfield; B. Zodikoff, New York City; J. J. Buettner, Syracuse; Samuel C. Lovejoy, Yonkers; George F. Phelps, Syracuse; Henry M. Quigley, Syracuse; Harry J. Bechtold, Rochester; D. J. Christance, Ithaca; C. G. Hacker, Albany; Philip Fitz, Yonkers; G. B. Sullivan, Plainfield, N. J.; William R. Warner (assistant), Crown Point.

The next meeting of the Board will be held in Albany in December. Three cases for violations of the law are now being prosecuted in the courts by the Board; four offenders have been convicted since the last meeting held in June.

The Interstate League.

We publish below in full the letter sent by Mr. Canning, president of the League, to Mr. Rontey, president of the New York City branch, in reply to the letter of Mr. Rontey, which was published in these columns a month or so since.

To A. M. Rontey, president N. Y. branch
I. R. D. L.:

I shall endeavor to reply to yours of recent date, as seems to me to be in the best interests of the League, in a broad and national sense.

Let me say, in opening, that I am a little disappointed at the slow growth of the N. Y. branch. We have been led to

suppose by the glowing accounts of your fortnightly meetings, that you were steadily nearing the 80 per cent. mark. We have the self-same conditions of trade to contend against in New England as are found in other parts of the country, and yet we are fast approaching a state of perfect organization, in fact it seems as though it were a question of but a few weeks. Boston and vicinity contains about 85 per cent. of the trade in its branch; very many branches throughout N. E. hold fully 100 per cent. of the druggists in their local associations, and *nowhere* has a branch been formed with less than the required 80 per cent. Why, Mr. President and gentlemen, many of our local branches (away from Boston) are already "living in clover"; "pulling together," and peacefully selling at *fixed schedule prices*; a few associations are enjoying their *second and even third advance in schedules*! All this, too, before the general League plan can be put into operation! The small cities and towns have somewhat the advantage of the great cities, for the latter must wait until the League is widespread before they may hope for relief, for *each great market must help out all the others before we can expect to cut off supplies from the department stores and "muslin" druggists*.

THE STRENGTH OF THE PLAN.

At first we find a little opposition to the clause requiring "Patents" to be sold at uniform rates to all retailers, regardless of quantity lots, but when the matter is explained, it is looked upon as the *strongest clause* in the plan. It removes all temptation to "divvy" with a friend (?) who may be a distant cutter,—it cuts off the latter from the extra 5 or 10 per cent. advantage over the regular dealer,—and it gives us a chance to more than make up on the *selling end*, what unfair competition compels us to try to make up on the *buying end* as at present, in the purchase of quantity lots to store away or divide with our neighbors.

Of course, I realize that in your city and in the West, you have many factions, if I may so express it, pulling this way and that, which it is difficult to harmonize. Again, I am sorry to say, there seems to be a disposition on the part of some of the so-called better element, to hold themselves aloof from their less favored neighbors. Let me say to the trade of New York and of the whole country, that we must have no "isms," in this grand effort for the benefit of *all*. Lack of organization has been our one cause of failure in the past, hence the advice of your leaders to *organize first*, this time. The most exalted in our ranks has as much to gain by this grand "pooling of interests," as his most humble brother, yes even more, because of his more extended business. Fortunately in New England, the *foremost* men in our calling are the *first* to realize the benefits to accrue from *organization*, hence the great success attained here. If we are to succeed, we must sink individuality,—throw caste to the winds,—and all "pull together."

PROPRIETORS ALIVE TO THE DAMAGE FROM CUTTING.

One of the arguments brought to bear against the League is "that the proprietors are not in sympathy with the retailers, etc., etc." Now, my dear sir, the proprietors, I am convinced, are fully alive to the injury to their business brought about by the conditions so ably pointed out in your letter; but suppose for a moment that the statement above quoted is true, is not such an assertion in itself the strongest argument that could

be brought forward in favor of organization? In such a case it should *not* be, do as you *think*, but do as you are *told*! I should be sorry to hold such pessimistic views, but would *even then* preach *organization*.

One of the strong features of the League plan is the fact that it benefits the jobber as much as the retailer. The N. E. Drug Exchange (wholesale dealers), realizing this fact, has been of great assistance to us in organizing, through their traveling men, and have contributed \$600 in money as well to help carry on the good work. Two years ago our Massachusetts State Association appropriated \$300 to organize the State locally. From this grew the "New England Retail Druggists' Union," an organization composed of the *officers* of all the State, County and City Associations in New England, thus coming in close touch with all local bodies. The principal object of this union is to organize branches of the Interstate League. It is, in fact, a sort of *sub-League*, and the money contributed by the jobbers is helping out *substantially* in the work.

LET THE JOBBERS HELP.

Can you not do the same in your great State of New York and thus make the work of organization easy? Can you not induce your jobbing trade to help in the work through their traveling men, and render financial aid, as ours have done? I have always maintained that if we could secure New York in addition to New England, that our cause was practically won! I see no reason to change that opinion. We are rapidly completing our part of the work in the Eastern States; *will you do your part?* The example of New York and New England *organized*, will be a stronger argument to the rest of the country, than any amount of *precept*.

To your first proposition, suggesting the lowering of the 80 per cent. requirement, reducing it to a bare majority, I would respectfully answer, that upon a little reflection you will see that such a course would be unwise, for no manufacturer would be willing to put a plan of protection into operation, with 40 or 50 per cent. of the trade against him. The League plan advises 80 per cent. membership so as to leave a liberal margin for outsiders, in other words, it *defines the cutters*, as being those over and above the 80 per cent. or more, who refuse to be bound by League prices, and you must admit that 20 per cent. will more than cover the *determined cutters* in any city.

To your second proposition, you will pardon me if I say that the League plan already contemplates substantially what you suggest, viz.:—"When the League has for membership the required 80 per cent. of members," or more, the goods will not be sold to those refusing to abide by its schedule, *except at full retail prices*,—thus allowing the trade price to League members *only*.

In closing, let me say that I have purposely delayed calling the annual convention of the League (being justified by its constitution in so doing), because I think it would be suicidal to call another national meeting, *before we are strong enough to put our plan into action*. Let me express the hope that the work of organization may speedily bring us to that happy day when "Whereas" and "Resolves" alone, will be no more!

Cordially yours,

HENRY CANNING.

Pres. Interstate Retail Druggists' League.
Boston, Mass., July 2, 1894.

MASSACHUSETTS.

Boston, Sept. 20.—What magnificent proportions the Interstate League has at last attained in New England! The swinging of Vermont into line completes the circle, which, together with the work going on down in Maine this week, will see the pharmacists of this section prac-

pletion of the good work which has already been begun in these cities. This feeling was uppermost at the recent meeting of President Canning with the officers of the Guild and Union which took place on the 6th of the present month. As a result of their deliberation four gentlemen prominent in the League work volunteered their services for a trip to New York and

MASSACHUSETTS SENDS MISSIONARIES.

The gentlemen who have so generously donated their services are President G. W. Cobb of the New England Retail Druggists' Union, N. W. Styles and F. W. Reeves, President and Secretary of the Apothecaries' Guild, and C. A. Charles, Secretary of the Malden Druggists' Association. They look to the Gothamites for assistance in this work. The opinion prevails here that the fullest success of the League plan hinges to a certain extent upon a complete organization of New York and Brooklyn. Our organizers often hear "if you had these two cities all would be well." It is a grand opportunity for the New York pharmacists to complete their organization and demonstrate the power which is theirs if only they will assist in this work.

VERMONT BROUGHT INTO LINE.

It has been shown beyond question that the organization of a State under the League banner is not such a difficult matter if carried on with determination and vim. Doubters have only to look at the successful work of Secretary Reeves in Vermont last month to be convinced of their error. Here was a State without organization of any kind and in which no meetings of pharmacists had been held since 1881. The trade was considered all cut up, many pharmacists of that State being convinced that business affairs had assumed a decided azure tint. There were skeptics who did not believe anything could be done; little encouragement was offered and discouragements were many, but despite the rebuffs, Mr. Reeves had the courage of his convictions, persevered, and organized Vermont so successfully that it is now the banner State of New England. All of this was accomplished in ten days, which Mr. Reeves unselfishly gave from his vacation and at an expense to the N. E. R. D. U., for travel, etc., of \$59. Seven county associations were formed, officers elected and the organization of each completed. County officers for the N. E. R. D. U. were appointed in all of the counties, and in the counties where no association was formed, these officials have agreed to see that the work of organization is completed at once.

The Franklin County Druggists' Association was one of the first formed and at one of the early meetings these resolutions were unanimously adopted:

"Realizing that in 'Union there is Strength' be it
Resolved, That this association earnestly favors and recommends the formation of a State association of pharmacists for mutual protection and advantage.

Resolved, That it is the sense of this meeting that only by united effort and concerted action, followed by systematic and intelligent work can the best results be obtained and substantial progress made.

Resolved, That this association hereby pledges its hearty co-operation and support to such an association and will ever work for its complete success."

THE VERMONT DRUGGISTS WORKED TOGETHER.

Just think of obtaining the signatures of 600 pharmacists out of a possible 612, yet this is what Mr. Reeves did in Vermont. A good indorsement of the League plan, is it not? These names make a list about ten yards long, and of which Mr. Reeves is justly proud. Mr. Reeves was much pleased with the final reception and assistance tendered him and in his report especially thanks the following: J. F. Pierce, Bellows Falls; F. W. Pierce, Chester; C. H. Hyde, Rutland; C. H. Thomas, Rutland; J. T. Shurtleff, Bennington; F. L. Taft, Burlington; G. L. La Fountain, Burlington; E. R. Crandall, Winoski; R. Brainard, St. Albans; A. L. Dutcher, St. Albans; F. W. Mitchell,



Frederick W. Reeves.

Secretary of the Apothecaries' Guild of Boston and vicinity, and organizer for the Interstate League.

Frederick W. Reeves was born in Manchester N. H., April 21, 1861. His parents soon moved to Cleveland, Ohio, where in 1872 he commenced business life as cash boy in a dry goods store. In 1875 he located in Cambridge, Mass., and entered the employ of one of Boston's dry goods firms. He resigned this position in 1877 and accepted a situation in B. F. Bradbury's drug store on Washington street, where by constant study and attention he soon made himself master of the druggists' art.

In 1884 he formed a partnership with a brother and opened a store at 5 Mount Auburn street, Cambridge. Their business has increased to such an extent since that time as to render several enlargements of their store necessary. In 1889 a wholesale branch was added for the purpose of handling several proprietary articles which they control. This is known as the Reeves Drug & Chemical Company, of which Mr. Reeves is president and manager.

Mr. Reeves identified himself with the I. R. D. L. at an early date, and has very generously devoted much of his time during the past eighteen months to that body.

He is the secretary of the Apothecaries' Guild of Boston and vicinity, also of the Cambridge and Somerville Druggists' Association. He is now in the work of organization, for before going to Vermont he visited five hundred druggists in other sections and obtained the written endorsement of all but thirteen to the League plan. Through his efforts forty-eight towns and seven cities have been organized for local benefits and in support of the League. His is an example worthy of emulation. It is within the range of possibilities that Mr. Reeves may be seen in the West later in the year engaged in League work. The idea is under consideration, but no decisive steps have as yet been taken.

tically united in the support of this organization. A conservative estimate places the membership of New Englanders at 85 per cent. In some sections the percentage is greater, in others smaller; the above figure being an average.

HOPE FOR NEW YORK.

Our workers of the Hub and vicinity are now casting anxious glances at New York and Brooklyn, being imbued with the idea that it is time to look for the com-

its vicinity. This will commence upon September 26, and will be of several days duration. Their mission will be to visit the trade, impart information regarding the League plan and its workings and arouse interest in a mass meeting of retailers, wholesalers and manufacturers which is to be held on some evening during the convention of the Wholesale Druggists' Association. President Canning will be present and address the meeting, as will also many proprietors and jobbers.

Richford; O. Newcomb, Newport; C. F. Bigelow, Newport; H. H. Wilder, Derby; C. C. Bingham, St. Johnsbury; H. A. Slade, Montpelier, H. P. Kendrick, Barre.

The following druggists were also appointed County Executive Officers for the New England Druggists' Union, and have accepted the positions: W. H. Sheldon of Middlebury for Addison Co.; J. T. Shurtleff of Bennington for Bennington Co.; C. C. Bingham of St. Johnsbury for Caledonia Co.; E. R. Crandall of Winoski for Chittenden Co.; J. M. Thurston of Island Pond for Essex Co.; R. Brainard of St. Albans for Franklin Co.; E. E. Evans of West Randolph for Orange Co.; H. H. Wilder of Derby for Orleans Co.; H. J. Drinnell of Morrisville for Lamoille Co.; D. S. Carpenter of Middletown for Rutland Co.; H. A. Slade of Montpelier for Washington Co.; J. F. Pierce of Bellows Falls for Windham Co.; F. W. Pierce of Chester for Windsor Co.

But Mr. Reeves' good work did not cease here, for under his careful tutelage a Vermont Pharmaceutical Association was formed, as was noted in the *DRUGGIST* a month since. Its officers are as follows:

President, A. W. Higgins of Rutland; 1st vice-president, E. R. Crandall of Winoski; 2d vice-president, W. V. Bryan of Waterbury; 3d vice-president, W. B. Eastman of St. Johnsbury; secretary, H. A. Slade of Montpelier; treasurer, R. Brainard, of St. Albans.

A legislative committee was appointed for the purpose of bringing things pharmaceutical to the attention of the legislators in an attempt to at once secure a pharmacy law.

At an adjourned meeting of this association held at Rutland on August 29, the following resolutions were adopted in appreciation of Mr. Reeves' services:

Resolved, That the thanks of the Vt. S. P. A., are due and hereby tendered to Mr. F. W. Reeves, of Cambridge, Mass., for his untiring energy and self-sacrificing efforts in the cause of pharmacy and our behalf.

Resolved, That had it not been for his earnest work throughout our State the past month as representative of the I. R. D. L., the organization of the various county associations and our S. P. A. would not have been perfected, and this association hereby expresses its unequalled approval of his entire work, and again we thank him.

AN OFFICE-HOLDING PHARMACIST.

J. Thomas Leary, Ph.G., is clerk of the gas commission of Mass., and also has a drug store at 755 Dudley street. He is in danger of losing his official position on account of a law passed last winter, which is as follows:

Section 1. The members of the board of gas and electric light commissioners, and the clerk of the said board, shall not engage in any other business.

Sec. 2. This act shall take effect upon its passage. (Approved June 21, 1894.)

Mr. Leary does not devote any time during office hours to his private business, still it is claimed that his continuance in office while engaged in business is a violation of the statute. It also gives those who are "hunting for scalps" something to look forward to. The Governor has been in no hurry to act, preferring not to interfere with the internal arrangements of the commission. He is said to have expressed the opinion though, that Mr. Leary should give up the drug store or the clerkship. Mr. Leary was appointed under a Democratic administration and that is said to have something to do with the present agitation. Commissioner Barker, a Republican, is very friendly to Mr. Leary, however. The salary of the clerk is \$2,000. Mr. Leary was for several years in the customs service. He be-

came very prominent at the time of the investigation of the sugar frauds in New York. He was the chemist in charge of the polariscope tests at the Boston Custom House, and, when the sugar frauds had demoralized the service at the port of New York, he was sent over to take charge of the sugar examinations.

THE NEW ENGLAND PAINT AND OIL CLUB.

A special meeting of the New England Paint and Oil Club was held at 71 Kilby recently to take action on the clause in the new tariff bill providing for a reduction in the tax on alcohol used in the arts or medicine, under regulations to be made by the secretary of the treasury.

About 20 members were present at the meeting, President A. D. McClellan in the chair, and Secretary S. J. Warren at his post. After a thorough discussion of the subject the sense of the meeting was unanimously embodied in the following resolutions:

"WHEREAS, Sec. 94½ of the administrative bill recently passed by the 53d Congress of the United States provides for a rebate of the tax upon alcohol used by manufacturers in the arts or in any medicinal or like compound, under regulations to be prescribed by the secretary of the treasury; and,

"WHEREAS, the firms constituting the membership of the Paint and Oil Club of New England are largely interested in the use of alcohol for such purposes, and find themselves unable to intelligently carry on their business in this respect, until such regulations shall be prescribed; now, therefore,

"Resolved, That the Paint and Oil Club of New England, in special meeting assembled for that purpose, does hereby respectfully request the honorable secretary of the treasury of the United States to determine and publish the regulations so required as soon as possible, and that such regulations may be as free from restriction as the due administration of the law will justify; and, further,

"Resolved, That the secretary of the club be, and is, hereby instructed to forward at once a copy of these resolutions to the honorable the secretary of the treasury of the United States."

DEATH OF CHARLES W. DRAKE.

Charles W. Drake, a well known business man of Middleboro, died at his residence on September 16, aged 45 years. He was a native of the town, receiving his education in the public schools and Pierce Academy. He had been a pharmacist for nearly 25 years. He was a past master of Mayflower Lodge of Masons, a member of Sutton Commandery of New Bedford, Knights Templar, a director of the Southeast Massachusetts Masonic Relief Association. He was also a member of Old Colony council 1152, American Legion of Honor. He had been an officer of the grand lodge of Masons of Massachusetts. He was for a number of years chief engineer of the Middleboro fire department. He was a member of the Central Baptist Church. He leaves a widow, son and daughter.

BITS OF GOSSIP.

H. B. Blackington, of Alleston, is on of James W. Tufts' latest customers.

E. F. Myrick, of East Boston, for exposing intoxicating liquors has been fined \$80; appealed.

Carter, Carter & Kilham's cellar was flooded recently, thereby ruining hundreds of dollars' worth of drugs.

J. E. McCarthy of Springfield, has opened a new store in which a Tufts'

fountain occupies a prominent position. Woburn drug clerks have a base ball club. A six inning game was played with the policemen of that city recently; the score was 20 to 17 in favor of the latter.

Theodore F. Rice, 1005 Washington street, has not opened his store to the public since it was visited by fire some weeks ago, and he is now engaged in closing out the stock and fixtures to the trade. The store is "to let."

C. I. Hood, of Lowell, recently displayed his prize Jersey cattle at one of our county fairs and it proved to be the feature of the show. The beautiful animals, of which so large a number and such fine specimens were never seen before, were universally admired.

New England pharmacists who have not joined the League are urged to do so at once. By communicating with any of the officials in this city or with the officers of their own State, those who desire to become enrolled will learn how it can be accomplished easily and expeditiously.

Allen Clark of Chelsea, had a glass door in his store broken by a brick thrown by a man who had no means of support and who wanted to be put where he could get enough to eat this winter. The glass-smasher was disappointed when the court gave him a sentence of only three months.

President G. W. Cobb of the N. E. R. D. U., and Secretary Reeves are spending a few days of this week in Maine. They are working in the interest of organization in connection with Vice-president Hazeltine of Portland and will attend several meetings which the latter has arranged.

Charles F. Lane of Tisbury is determined to obtain a sixth-class license or ascertain the reason why he cannot have one. His lawyer appeared before Judge Barker recently and secured an order of notice upon the selectmen of that town to show cause why they should not issue a license. The order is returnable for the first Monday in November.

Ira Worcester's store at New Bedford was raided on the 15th and considerable beer was seized. On the same evening the alleged drug store of Henry L. Rooks was visited and a quantity of liquor secured. Rooks could not be found at the time; the police want him for keeping a liquor nuisance. On the morning of the 17th, however, Rooks was found dead in his store. There was nothing to indicate foul play or suicide.

The *New England Druggist* is in error in stating "that the presidents for the ensuing year of five of our State Pharmaceutical Associations are vice-presidents of the New England Retail Druggists' Union," and also in citing A. W. Higgins of Rutland, Vt., as serving in this dual role. Mr. Higgins is president of the Vermont S. P. A., it is true, but his partner Mr. C. H. Hyde has the distinction of being the vice-president of N. E. R. D. U.

A sensation has been caused at Portland, Me., by the indicting of many of the wholesale and retail druggists of that city for liquor selling. The evidence was obtained by a spotter in the employ of a deputy sheriff who was recently removed from office. The druggists indicted on the first day were: William F. Stone, Hanson T. & W. W. Whipple, John W. & Benjamin A. Perkins, George L. Fogg, W. S. Malley, Charles Cook, Edward S. Everett and Henry B. Pennell.

A fine of \$50 was paid in each case.

PENNSYLVANIA.

PHILADELPHIA, September 20.—When the students of the Philadelphia College of Pharmacy return for the fall term they will have a chance to inspect an innovation—the Laboratory of Microscopy and Pharmacognosy—which now occupies the former quarters of the Alumni Association on the fourth floor. The establishment of this department on a working basis is the result of much persistent effort on the part of Professor Bastin, and the expenditure of about \$8,000 in money. There was some opposition to the plan from a few members of the Board of Trustees, but finally it was overcome and now everybody connected with the college is proud of its laboratory of microscopy. So they should be, for it is the best equipped of its kind in the country. The students can make up their minds to become microscopists. In fact the faculty has done much to make up their minds for them, for compulsory examinations in the use of the microscope are to be the rule hereafter. As a result this laboratory assumes a position alongside those of pharmacy and chemistry. The hours for study will be much the same, and owing to an excellent system of electric lighting classes can be instructed at night as well as during the day. Daylight in the laboratory is available through windows on three sides of the room, a very desirable feature for such investigation.

DETAILS OF MICROSCOPY LABORATORY OF THE P. C. P.

The attention to details in the plans has resulted in the laboratory being full of novel devices for aiding the student in his work. Keyless locks are on the drawers which are kept closed by combinations. The long tables have had their surfaces treated with paraffin, so that acids or other corrosive reagents will not stain the boards. Convenient receptacles for the microscopes and for specimens of vegetable drugs have their appropriate places in closets along the walls. A fume hood answers a useful purpose. Plants to be treated by chemicals for the purpose of separating cellular tissue will be taken there, so that the atmosphere of the laboratory will be kept free from noxious or disagreeable vapors.

Twelve glass-capped reagent bottles will be within reach of the operator, each of which will contain a glass tube as a dropper, so waiting will be avoided when different liquids are employed in mounting specimens. And what is most important of all—the microscopes: they are of the finest design and finish. The juniors have 100 simple instruments at their disposal, and the seniors the same number of compounds. It is expected that 100 students will be in the laboratory at a time.

UNDER PROFESSOR BASTIN'S PERSONAL DIRECTION.

Professor Bastin will personally direct the students' efforts to become acquainted with the mysteries of the microscope. He will deliver a lecture of half an hour outlining the methods to be pursued and the nature of the specimens under consideration. The balance of the two hours will be devoted to practical work. The Professor has in course of preparation a chart which will be an invaluable aid for this laboratory.

Professor C. B. Lowe and Professor J. L. D. Morrison will be Professor Bastin's assistants in the laboratory as well as in the materia medica lecture room. Professor Morrison is the latest addition to

the list of instructors at the college. He is a thorough student, a hard worker and ambitious. He also has the interest of the college at heart. He graduated in the class of 1888, and was the prophet of that year. Later on he received his medical degree from Jefferson College. At present, in addition to his duties at college he is conducting a pharmacy at Tenth and Cumberland streets. Dr. Morrison is one of the active spirits of the Alumni Association, holding the office of vice-president. Together with Dr. Lowe, he has had plenty to do during this month to get the laboratory into shape, and they now have the satisfaction of seeing the place in apple-pie order, ready for juniors and seniors alike.

AN ARSENIC POISONING CASE.

Mrs. Blankford, of 2539 Eagleson street, bought arsenic for rats at a neighboring drug store recently and took the powder home in a loosely corked bottle. It was placed on a shelf and presumably forgotten. The woman's two year old daughter got hold of it. She was taken to the Children's hospital in a dying condition, leaving the mother distracted over her baby. A poison label did no good in such a case.

A CORONER'S CASE.

The coroner's office brings out features of cases of some interest to pharmacists. Last week Dr. Theodore Spiessler, who has a pharmacy at Ninth and South streets, was given a chance to explain what he knew about the death of a woman who died of exhaustion. The woman's husband said that Dr. Spiessler had prescribed port wine. At his store the price given for port wine was 90 cents a quart, but he alleged when a prescription was presented the rate was raised to 45 cents a half pint. This led to trouble between the doctor and his patient's family. After another doctor had been engaged he closed his visits. The woman died, but Dr. Spiessler's conduct was not censured by the coroner's jury, who failed to see any neglect on his part.

COUNTER PRESCRIBING BY PHARMACISTS.

The question of counter-prescribing by a pharmacist bobbed up again yesterday when Harry Garrow, a clerk at Seventh and Spring Garden streets, was arrested on complaint of Dr. George I. McKelway, of 1613 Locust street. Dr. McKelway charged that Garrow had usurped the prerogatives of a physician, and not being a registered practitioner, was amenable to law. Garrow was held for a further hearing by the police magistrate. It was alleged that he had secured the confidence of people who supposed that he had a right to practice, and who spoke of ailments with more freedom than they would have to a layman.

THE TAX-FREE ALCOHOL QUESTION.

What the outcome will be in regard to free alcohol is as much an open question now as it was several years ago. Provisions that will suit the wholesale manufacturer do not suit the retailer, and it is this way throughout. It is generally conceded that nothing can be done by the Secretary of the Treasurer that will suit all concerned, and the ideas generally suggested are purely selfish ones, and should not for a moment be entertained. To carry the law into effect it is essential that all parties should be treated alike, and while the rich manufacturer may be able to pay for the necessary safeguards required it is plainly evident that the retail druggist is in no position to do so. A well-known wholesale drug dealer said

yesterday: "The best thing that can be done is for Secretary Carlisle to compel the users of alcohol, druggists as well as others, to pay the duty, and then when Congress meets, have enacted such laws as will exempt them from paying any duty on alcohol used by them in a legitimate way. As it is there has been no plan as yet presented which will alleviate the difficulty. Of course, certain houses that use large quantities of alcohol could afford to have a building set apart for the storage of it, and by this means have a watch kept over it, but the retail druggist, who has as much right to be protected as well as the big one, cannot afford it, and to enact a ruling of this kind would be an injustice to him. As it is the matter remains in statu-quo ante and is likely to remain so for some time to come."

A DARING RESCUE.

A daring rescue was made at Longport, on Saturday, September 7th, of the two daughters of Dr. Ashton, of Eighth street, near Chestnut, Philadelphia, and their guest, Miss Annie Thompson, daughter of Lawyer Newton Thompson, of Germantown. The young ladies donned bathing suits and went into the water at the lower end of the beach with Arthur and Percy Remington, the young sons of Professor J. P. Remington, of the Philadelphia College of Pharmacy, who are likewise summer residents at Longport.

The recent northeast winds had cut out a dangerous "slue," and the three young ladies, who had entered the water ahead of their two escorts, soon found themselves in the grasp of a strong under-current, that rapidly carried them toward the treacherous gully. They cried for assistance, and the young men, realizing the girls' peril, plunged into the surf.

They reached the badly frightened girls only to find, when they attempted to go back, that the undertow was carrying them further from shore. Then began a struggle for life that, though finally won by the rescuers, very nearly resulted in the drowning of the entire party.

Miss Thompson was not so far out as the others and regained shore unassisted, though so much exhausted that she fainted on the sand. There was no one to assist the Remington boys in bringing the other two girls ashore, and they had a most exhausting battle with the waves. Rescuers and rescued were assisted to their homes, and soon had fully recovered from their very unpleasant experience.

THE PEOPLE AS THEY PASS.

Rush P. Marshall, the bicycling druggist of Sixteenth and Race streets, who has been quite ill for some time, is able to be out again, for which we are sincerely grateful.

Andrew Walter, who has been until recently with Kennedy & Burke, at 11th and Girard avenue, has purchased the drug store at 27th and Montgomery avenue from Samuel Ludinger.

George W. Harris, who is patronized by the elite of Philadelphia at his store at 20th and Christian streets, has taken his wife to the Delaware Water Gap where they will remain several days.

J. H. Buckingham has handsomely furnished his store at 17th and Mt. Vernon streets with new fixtures, besides adding a large bulk window, with a new entrance at the corner. This neighborhood is a select one, and very profitable to a wide-awake druggist.

The regular monthly meetings of the directors of the Philadelphia Drug Exchange will be resumed on the first

Wednesday in October. During the summer months the directors adjourned and since then one special meeting has been had, at which the free alcohol muddle was taken up.

Druggist Niskey, of Ridge and Girard avenues, contemplates the remodeling of his store, as his business has so increased that his facilities are not large enough. He intends to convert a room on the east into the store; besides this he will place in new fixtures and he hopes to make it one of the brightest, prettiest and most generally known up-town drug stores.

Theodore Maris has returned from a pleasure trip abroad. Mr. Maris previous to his departure was quite ill, but now he has fully recovered and is again fit to enter the arena. "Theodore," as he is known to his friends, and they are legion, is one of the most popular young men in this city, and everybody is pleased to know him. Perhaps this accounts for the big trade his house does.

While Philadelphia is considered a slow town, the representatives of drug houses in other cities who are lucky enough to have the acquaintance of some of the home salesmen can usually have a "ololy time, and the way they look the next morning, their fun must have been fast and furious. A certain dignified salesman, from another city, got into the swim last week, and enjoyed a trolley party ride.

A drug store without a fountain is beginning to be a rarity in this city. All the latest fitted up stores have them put in the most conspicuous place, as the revenue derived from them is as much as compounding drugs, and it is not so hard either. During last summer the merry sipping of the soda-water fountain was as pleasant to the girl who had to stay at home as one of Wagner's operas, in fact it was more so, for as soon as they became acquainted there was a desire for more of the stuff that cheers but does no harm. There are a number of fine fountains here and if everything goes right this fall many druggists will have attachments made so that they can dispense hot soda and other warm temperance drinks.

Mr. Berkstresser, the head night clerk in George B. Evans' Chestnut street store, is not only a favorite among the lady customers, but he is possessed with an artistic eye. He does all the dressing of the big show windows of this firm, and there is not a week goes by that he has not some novelty displayed. Last year he graduated from the Philadelphia, College of Pharmacy, which makes him doubly useful to Mr. Evans.

The trolley parties on the People's Passenger Railway Company from Germantown to the lower end of the route and return has been a good thing for the druggist who has his store near the end of the route. After the ride the passengers were naturally thirsty, and as nothing but temperance parties were permitted to engage a car, there was considerable ginger ale, sarsaparilla, and other such beverages put out of sight at the conclusion of the trip.

Even old sleepy Camden, the little town on the other side of the Delaware river, has awakened to the fact that soda water fountains are indispensable to a well-stocked drug store. Lewis H. Wilson, who owns, controls and operates the pharmacy at Fourth and Linden streets, has had placed in his store a handsome onyx fountain by Lippincott. It has all the latest improvements and is very attractive and adds greatly to the complete furnishing of the store.

George Freshell, 3526 Haverford avenue, is the most talked about man in West Philadelphia, although most of the credit is due his sister, who had a big part in arranging the sensation. A few weeks ago, during the dull moments which come to every drug store, Mr. Freshell hit upon a display which was not only unique, but could not fail to attract attention. It was nothing more or less than the making of a fac-simile of a woman out of sponges and chamols. He confided his scheme to his sister, and between them the display was arranged. The figure was life-size, and it was dressed in the latest style clothes. At a short distance it looked as if a real live lady was in the window, and when once seen at a distance a closer examination invariably followed. This is considered the most original display seen for a long time.

A few days ago Harry Nicholson attempted to commit suicide, and he would have been successful if it had not been for a wide-awake drug clerk. Nicholson had walked about all day in search of work, and as he was unsuccessful he thought life was not worth living. He walked into the drug store at Ninth and Race streets and bought five cents' worth of laudanum, saying it was for corns. As soon as the drug was handed him, however, he swallowed it all, and then ran out of the store, closely followed by the clerk, who was determined that the man should not die through his instrumentality. After a short chase the clerk captured the would-be suicide and compelled him to go back to the drug store and swallow an emetic, and after it had got in its work, a policeman was notified, and Nicholson was taken to the Hahnemann Hospital, where the emetic was supplemented with a stomach pump and the patient was soon out of danger.

MARYLAND.

BALTIMORE, September 20.—Baltimore considers herself especially favored and honored by the election of two of her pharmacists, at the Asheville meeting of the American Pharmaceutical Association, to fill important offices. Mr. Charles Caspari, Jr., as permanent secretary, and Dr. Alfred R. L. Dohme as chairman of the scientific section. We all feel assured that both gentlemen will fill their respective positions with dignity and capability.

Alexander Kammer, class of '93, M. C. P., has registered as manager of Denton's Pharmacy, corner North and Park avenue.

J. Harry Surratt has passed the Board of Pharmacy and has registered as managing assistant of Kunze's Pharmacy, 1515 Eastern avenue.

Morris Shanks has registered as managing pharmacist of store corner Drude and Huron avenue.

Geo. Way, the genial assistant of J. Chas. Smith, is enjoying the breezes of the Atlantic. He contemplates a short stay at Atlantic City, Cape May, Coney Island and other resorts.

At the examination of the board of pharmacy, held on Sept. 10 the following applicants passed: Henry Fendler, Albert W. Firth, Fred. W. Drenckhahn and Julius Sachs. During the last three months 117 pharmacists were registered. Ten pharmacists were convicted and fined for violation of the pharmacy law. Eight are still under bail awaiting conviction. The next examination will be held on October 8, at 9 A.M.

Gilpin & Langdon's drug establishment 24 Light street, Baltimore, caught fire September 8. The fire must have been burning several hours when it was discovered. An alarm was turned in about two o'clock the following morning. The building is a four-story brick structure. The first floor was used as an office; second floor, for pulverizing drugs, and third floor for grinding drugs. The second, third and fourth floors, with their contents, were badly damaged by fire and water. The upper floors of the structure were completely burned out. The amount of the damage to stock and furniture will exceed \$5,000. The building, stock and machinery, which are owned by the firm, are insured for \$30,000.

Maryland Pharmaceutical Association.

The annual meeting of the Maryland State Pharmaceutical Association was held August 29 at the Blue Mountain House, Blue Mountains, Md. The meeting was called to order by the president, Dr. John Briscoe, with John W. Geiger as secretary.

Mr. Hynson proposed the names of Harry C. Gilpin, of Baltimore; G. F. Smith, of Sharpsburg; Thomas G. Farwood, of Belair; G. E. Pearce, A. F. Parker, of Frostburg; Henry Maisch, of Baltimore, and R. L. Van Deventer, of Hagerstown, for membership. They were all unanimously elected.

President Briscoe selected as a committee to nominate officers for the ensuing year: D. C. Aughinbaugh, J. Fuller Frames and J. H. Hancock. and at the afternoon session the committee reported as follows: President, John F. Hancock; first vice-president, H. P. Hynson; second vice-president, C. B. Henkel; third vice-president, Geo. E. Pearce; secretary, John W. Geiger, and treasurer, Samuel Mansfield.

Messrs. Aughinbaugh and Byers addressed the association at some length in regard to efforts made to secure a proper pharmacy law. Mr. Hynson moved that the committee on legislation be allowed to increase its membership until every county in the State is represented by at least one member to make legislation. This was adopted. The association will meet in Baltimore on the second Wednesday of May, 1895.

The association has been making a great effort to secure the enactment of laws to regulate the practice of pharmacy, so that incompetent men cannot engage in the business. These laws are wanted by the State outside of Baltimore, as Baltimore has a local law which was enacted in 1892.

North Carolina Pharmaceutical Association.

The fifteenth annual meeting of the North Carolina Pharmaceutical Association was held in the Young Men's Christian Association Hall in the city of Asheville, on Monday, September 8rd, 1894.

The Association was called to order by President Tetzer of Concord. Prayer was offered by Rev. Dr. H. F. Creitzberg, pastor of the Methodist church of the city. A cordial address of welcome was delivered by Mayor T. W. Patton, which was responded to by J. H. Babbitt of Raleigh, N. C.

Reports were read from the president, secretary, and treasurer of the association and for the secretary of the Board of Pharmacy, all of which showed that the Association was in good condition financially and otherwise.

The report of the secretary showed that since the last meeting of the Association, postal cards had been sent to the druggists of the State requesting an expression of opinion on the subject of closing the stores early during the week, and for a time on Sundays.

All of those replying favored closing for at least a few hours on Sundays. Seventy-five advocated closing at 9 P. M. on weekdays, and a few named 10 and 11 respectively as the hour for closing on week days.

Reports were also made by the delegates who attended the last meeting of the American Pharmaceutical Association, as well as those who attended the meetings of the South Carolina and Virginia Association.

Quite a large number of the members of the American Pharmaceutical Association were present at the meeting and the courtesies of the floor were cordially extended them. The privileges of the floor were also extended to the press and to the physicians of the city. A brief adjournment was had to enable the members of the two Associations to meet each other.

On convening after this recess M. W. Alexander, of the American Pharmaceutical Association, thanked the Association for the courtesy extended to the visiting members.

Wm. Simpson, Secretary of the North Carolina Board of Pharmacy reported that there had been considerable difficulty in interesting the State institution and the Legislature in the project of a school of pharmacy.

Mr. Dadd, of Wisconsin, made a statement as to the factors which brought about the success of the school of pharmacy of the University of Wisconsin.

Henry Kraemer, of New York, Reporter on the Progress of Pharmacy of the American Pharmaceutical Association, here presented a paper on the *Materia Medica of Ceylon*, the material of which was largely collected at the World's Fair in Chicago in 1893. In this paper Mr. Kraemer mentioned many interesting facts concerning the practice of medicine in Ceylon, and as to the *materia medica* of that country. A special vote of thanks was tendered Mr. Kraemer for his paper.

A paper on a peculiar principle of gentian, by E. V. Howells, of Rocky Mount, was then read by Wm. Simpson. In this paper the author drew the conclusion that the crystalline colony principle isolated from the gentian, is a glucoside, and is a decomposition product of quercitron.

Augustus Bradley of Raleigh read two papers, one entitled "Prescription Difficulties and the Way Out of Them," the other entitled "A Plea for the Complete Adoption of U. S. P."

All of the above papers were referred to the usual committee for publication.

Several very interesting queries were taken from the "Question Box" and discussed at length by the members present.

The association will hold its next meeting at Moorehead City. The time of meeting was left with the Executive Committee.

The following officers were elected for the ensuing year:

President, J. Hal Babbitt, of Raleigh; first vice-president, P. W. Vaughan, of Durham; second vice president, Augustus Bradley, of Raleigh; third vice-president, R. L. Dixon, of Milton; secretary, H. R. Horne, of Fayetteville; local secretary, B. C. Jones, of Moorehead City; treasurer, A. J. Cook, of Fayetteville, and member of the board of pharmacy, O. M. Royster, of Hickory.

EXECUTIVE COMMITTEE.

W. H. King, of Raleigh; W. M. Yearby, of Durham; W. W. Parker, of Henderson; D. L. Adams, of Raleigh and H. R. Horne, of Fayetteville.

F. W. Hancock, of Oxford and H. R. Horne, of Fayetteville, were appointed delegates to the American Pharmaceutical Association in session in the city, in place of two appointed delegates who were absent.

There were ten applicants before the State Board of Pharmacy for examination to practice, four of whom were successful, as follows: P. C. Sneed, of Durham, J. H. Goodman, of Concord, C. A. Walker, of Huntersville and John Banner, of Moorehead City.

The Board of Pharmacy resolved to prosecute any violations of the pharmacy laws that they should hear of in the State.

The Association had on exhibition five hundred specimens of drugs indigenous in the State. This is a collection belonging to the State. There are said to be 2,400 indigenous drugs in the State.

The members of the Association expressed much gratification at the compliment paid them and the State in the election of Mr. Simpson of Raleigh as president of the American Pharmaceutical Association.

Fraudulent Registration in South Carolina.

At the meeting of the South Carolina Pharmaceutical Association a negro appeared for examination for the first time in the history of the board. Of the eleven applicants for examination this negro, who gave his name as Thompson, and one white man, were the ones who passed. About a week after the announcement of the results the board received a communication from some person in Spartansburg, stating that there was something suspicious about Thompson, who had opened a store there, as it hardly seemed possible that he was sufficiently well-informed to pass the examination.

Investigation showed that it was not Thompson at all who had passed, but a clerk of his named Crewes, who had passed the North Carolina Board the year previous. This Crewes was a student at Shaw University in Raleigh, where he studied pharmacy and passed a brilliant examination before the North Carolina Board. Both Thompson and Crewes were put under ball, but left town forfeiting their bail before they were brought up for trial.

OHIO.

CINCINNATI, September 20.—On the morning of the 16th inst. John D. Park, the head of the firm of John D. Park & Sons Co., was stricken with paralysis at his home near Mildale, Ky. Physicians were summoned and the aged man was given all the human aid possible, but in spite of the attentions showered upon him he passed to the great beyond on the following day at 1:45 A. M. His death was painless and when he passed away his couch was surrounded by the members of his family.

JOHN D. PARK'S SUCCESS.

John D. Park was one of the best known dealers in proprietary medicines in the United States. He had been in business in this city for more than a half century, and at the time of his death had accumu-

lated a competency. The deceased was born at Livingston Manor, near Poughkeepsie, N. Y., in July 1816, and was therefore 78 years of age. His early life, in fact, up to 25 years of age, was spent in that immediate vicinity, working on a farm and studying medicine principally. At the age of 25 Mr. Park came to this city and embarked in the proprietary medicine business at Fourth and Hammond streets. His business prospered from the start and he soon removed his establishment to the corner of Fourth and Walnut streets. In the last named location the business grew rapidly and more commodious quarters were found necessary. In 1877 the business was moved to Nos. 175, 177, and 179 Sycamore street, where it has since remained. At the time of the last mentioned removal the retail part of the business was discontinued. In 1891 Mr. Park celebrated his fiftieth anniversary in business and the concern was made a stock company. At that time the capital of the concern was something like \$200,000. The business has grown steadily, however, and at the time of Mr. Park's death it is thought that twice the above was used in conducting the affairs of the company.

HIS TILT WITH THE N. W. D. A.

It will be remembered that a short time ago the firm of John D. Park & Sons Company was the plaintiff in an injunction suit in which the N. W. D. A. was interested, George Bower, of the Proprietary Medicines Committee, of Philadelphia, being a co-defendant with all the wholesale druggists of this city. The details of the suit were published in this journal at the time. The case was dismissed at the plaintiff's cost without prejudice in the Superior Court by Judge Hunt. The litigation was brought about over some alleged "cutting" in prices by the plaintiff. The firm of John D. Park & Sons Company is the most extensive of its character in the West, and its growth is due principally to the foundation laid by the deceased head of the concern. In addition to the money invested in business the deceased owned the property on Sycamore street, in which the concern held forth and it is valued at \$75,000. He also owned a beautiful country place near Mildale, Ky., where the last hours of his life were spent. In 1845 Mr. Park married Mrs. Susan Rice, of this city, and ten children, seven of whom are living, blessed their union. Ambro R. Park, the eldest son, is the vice-president of the Company. Godfrey, Charles and William Park, the other sons, are also interested in the business in various ways. Miss Sue Park, the eldest daughter is secretary of the company. The remains of Mr. Park were interred in Highland Cemetery in Covington after services at the Union M. E. Church.

RESOLUTIONS OF SYMPATHY AND RESPECT.

At a meeting of the old business friends of John D. Park, deceased, held at the Gibson House, September 18, James S. Burdsal was called to the chair, and Mr. S. M. McKenzie appointed secretary. Feeling remarks were made by Mr. Burdsal, Mr. Geo. Merrell and others in respect to the deceased, and upon motion, the chairman appointed a committee, consisting of Messrs. Merrell, Reakirt and Gray to draft suitable resolutions for the occasion. Whereupon the committee reported the following resolutions, which were unanimously approved.

RESOLUTIONS.

WHEREAS, Our aged friend and esteemed business contemporary, John D. Park, has by the Providence of the Lord been removed from our midst, and passed into the other life after a long, useful and successful career; and

WHEREAS, Our associate so recently deceased was the sole remaining representative in active business of the period of prosperity in our especial lines, looked upon by all of us with so much satisfaction and encouragement to ourselves; therefore be it

Resolved, That we hereby bear willing and sincere testimony to the genuine worth of our deceased friend and business associate, John D. Park, in all the several relations of life in which we have come in personal contact with him.

Resolved, That we recall as a pleasant remembrance his cordial greeting to friend and stranger, young and old; his kindly interest in the successful or unfortunate, and the willing assistance wherever help was needed; his quiet and peace loving disposition, attended as it was with a strength and courage which enabled him to overcome the many obstacles to success throughout his long and varied business experience, bearing in mind the many enviable qualities of mind and heart, we are reminded that all are elements of a substantial manhood, which insure success where less strong characters fail.

Resolved, That we extend our sincere and heartfelt sympathies to the widow and family of the deceased, and that our feelings find further expression by the attendance at the funeral services.

Resolved, That a record of this action be sent to the family and principal trade papers of the country.

A TOUR OF INSPECTION.

One day last week your correspondent had the pleasure of making a tour

is of vari-colored tile and the firm's name is here seen again. On either side the wainscoating of natural wood, highly polished, attracts the eye. The abundant use of iron and stone to be seen on entering the main hall way is in marked contrast to some of our other new buildings where the matter of fire has been given a secondary consideration. The entire structure is absolutely fire-proof.

THE FIRST FLOOR.

On entering the first floor the large and well lighted offices of the concern first attract the attention of the visitor. They are arranged in a triangular shape, and are equipped in the most modern and approved style. Everything is "brand splinter new" even down to the penholders used by the hosts of stenographers and book keepers. As the busy employes move to and fro they can see their images reflected in the highly polished floor of hard ash wood. They have little time for gazing at themselves, however, judging

THE STILL ROOM.

The next place visited was the large still room where a small army of men were at work. Notwithstanding the fact that a number of preparations were being made there was scarcely any odor in the room, which was doubtless due to perfect ventilation of the place. In the room adjoining were several rows of huge copper percolators. Here also a large number of men were at work and the finished product could be seen in packages ready for removal from the room. Still further in the rear was the specialty and elixir room, where a busy scene was also presented.

THE ANALYTICAL LABORATORY.

Adjoining the still room is the Analytical Laboratory, where every facility is provided for testing chemicals, assaying drugs and all products purchased and manufactured by this enterprising firm. Experimental work is also carried on here, with the end in view of improving processes already in use and devising new methods and preparations which the conditions of trade and the uses of the physicians demand.

THE SHIPPING ROOM.

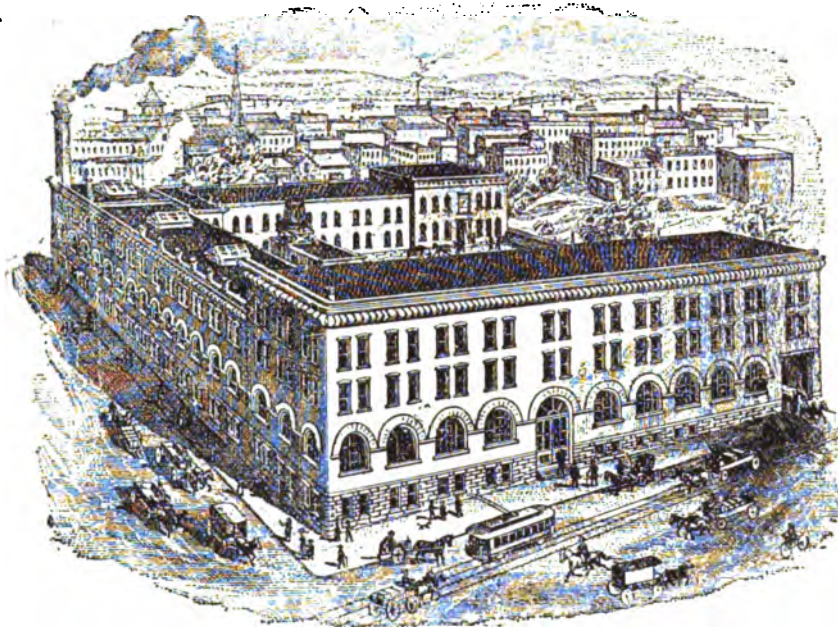
Going from this room to the right wing of the main building the visitor reached the Shipping Room where the business scene of the day was being enacted. Piles upon piles of boxes were being hustled into waiting wagons and a large force of men were at work. The immense room is divided into two stories as it were and the finished goods and specialties bearing the well known brand of the Wm. S. Merrell Chemical Co. were to be seen on every hand. Looking through the large doors a long row of wagons was noticed and the drivers were waiting for their turns to get their loads. These vehicles are accommodated by a large court in the rear of the building which is paved with asphalt. No debris was to be seen anywhere.

THE BASEMENT.

In the well-lighted basement, which was next visited, were seen a number of drug mills in active operation. The crude material for hydrastric salts and similar products were being prepared and the scene was indeed a bustling one. In one of the side apartments was seen the large fans which regulate the temperature in the drying rooms above. The several apartments here were seen to be in excellent condition, as they were all nicely painted and in good trim. All the machinery of the engine room, where the motive power for running the establishment is gotten, was in apple-pie order.

THE SECOND FLOOR.

On the second floor, which was next visited, the largest number of employes was found. The Finish Room is a large apartment in which a number of men and girls were found at work. In one corner was the label room, while in the corner at the other end of the main floor was the poison department. All goods of a poisonous nature are put up here so there is no chance of a drug of poisonous properties being mistaken for any other product. Many of the well-known specialties of this firm were seen in this department and the neatness of the various packages was testimony of the excellent manner in which the Merrells send out their products. A number of young ladies are employed in this department who have been with the firm since childhood. They all understand their various



LABORATORIES OF THE WM. S. MERRELL CHEMICAL CO., CINCINNATI.

of the new plant of the William S. Merrell Chemical Company at Fifth and Butler streets, under the guidance of Mr. George Merrell, Jr.

THE NEW BUILDING OF THE WM. S. MERRELL CHEMICAL CO.

This is one of the most extensive chemical manufacturing establishments in the West and for completeness it certainly cannot be surpassed. The design for the building was the work of Mr. George Merrell and nothing looking to convenience or progressiveness has been overlooked. The appointments are almost perfect. The exterior of the main building is of red pressed brick with dressed stone trimmings, and the windows are all of French plate glass.

THE MAIN ENTRANCE.

As one approaches from either side a most imposing view is presented. Over the massive arched entrance on Fifth street the name of the company can be seen engraved in the stone overhead. This main entrance is of a modern design and is similar to that of an "up-to-date" playhouse or other public building. The floor

from the immense piles of books and papers seen by your correspondent. Activity seemed to be the watchword and there was evidently such a distribution of the office work that everything moved similar to a piece of well oiled machinery.

OFFICE ARRANGEMENT.

The arrangement of the offices is such that there is a large reception room for visitors which is fitted up with easy chairs. Directly in the rear of the offices is the library, which contains all the best works on chemistry and the allied sciences. In the center of this room there is a large oblong table which is surrounded by a number of easy chairs. The floor is nicely carpeted and the room as a whole presents a very cosy appearance. In the room adjacent to the library is the chemical laboratory, which contains all the necessary appliances for that department. On several long tables in the room may be seen test tubes, funnels, graduates, percolators, burettes, spirit lamps, and similar apparatus. The chemist in charge of the laboratory may be seen watching the progress of the various preparations under way.

duties and the neatness and dispatch with which their labors are performed speaks volumes for the training which they have received.

OTHER DEPARTMENTS.

The various other departments on this floor are devoted to preparing pills, tablets and specialties of this well-known house. The Mixing Room, Mass Room, Tablet Room, Sugar Coating Room, and Drying Rooms were all visited with much interest. In all these rooms cleanliness was the feature, and it seemed well nigh impossible for any foreign matter to get into anything in the course of preparation.

CITY JOTTINGS.

The soda water business is fast glimmering.

Local druggists report business in general as picking up.

C. P. Calvert, of the Standard Drug Company is back from Alderson, W. Va., where he went on a fishing trip.

Joseph Dehner, formerly in the drug business at Seventh and Vine streets, will soon become a Pullman car conductor.

Sam J. Hale, the senior member of the firm of Hale, Justis & Co. has returned with his family from a tour of the Great Lakes.

Wilmot Hall reports business as booming at his two stores on Fourth street. Both places have been renovated and repainted.

Ed Gray was noticed in the stand at Latonia occupied by Gill & Cosbook. He was acting as cashier, but the job didn't last long.

Louis Heister is again at his handsome pharmacy after a short season at Asbury Park, where he enjoyed the bathing with his family.

Karl Kuhlman has returned from San Francisco, and is working for Otis & Co. at night and going to medical college in the day time.

The College of Pharmacy is now running in full blast and the attendance exceeds that of any previous year. Good for those in charge.

The house of W. T. Rhoades, a druggist of Ashland, O., was entered by burglars a few nights ago, was secured much valuable jewelry.

This city was represented at the A. P. A. meeting at Asheville, N. C., by Dr. Julius Eichberg, Professor J. U. Lloyd, and Dr. C. T. P. Fennell.

Herman Serodina has purchased the Evans Pharmacy at Fifth and Vine streets, and the store is to be enlarged and refitted in the most modern style.

The next issue of The Journal, which is published by the College of Pharmacy, will be issued on October 1st. The paper, it is said, will contain some very meritorious articles on pharmaceutical questions.

Matt. Yobston, the clever Central avenue druggist, does not believe in retail pharmacists descending to the level of common tradesmen. He is not in sympathy with the every-druggist-his-own-patent-medicine maker idea.

The resignation of Joseph Hall, the apothecary, at the City Hospital a few days ago, caused no end of talk in drug circles. Mr. Hall has been in the employ of the Hospital for more than three years and was thought to be a fixture at that institution. His resignation, it is said, was tendered because he expects to engage again in the retail business.

IOWA.

DES MOINES, Sept. 20.—Notwithstanding the long drought and the consequent depression, traveling men visiting the drug trade report business as good, and say that trade in all lines seems to be holding up remarkably well.

F. E. Horton, of Maurice, has removed to Struble.

Jos. Wiewell & Co., of Early, have disposed of their store to W. E. Andrews.

Veatch & Co. have opened a new drug store in Cottage Grove avenue, Des Moines.

T. H. Winfrey of Runnells, visits Des Moines a few days since. He reports business as quiet.

John Harriott, a popular pharmacist of Stuart, is the nominee of the Republican party for State Treasurer.

The firm of Cole Bros. & Co., Eagle Grove, has dissolved. Cole Bros. have withdrawn from the firm.

M. W. Garrity has started a saloon in a room on 4th street, Des Moines, formerly occupied by him as a drug store.

A. E. Willis, of Perry, has taken his brother in partnership, and the firm will hereafter be known as Willis Bros.

O. C. Snider has purchased the drug store formerly owned by M. J. Lounsbury, Des Moines, and is refilling and replenishing the same.

Walter Scott, a popular Des Moines druggist, spent his vacation visiting the Eastern cities, New York, Philadelphia and Boston.

M. J. McCullough, formerly in the drug business in Menlo, has purchased the stock formerly owned by Coe Bros. corner of 6th and Grand avenue, Des Moines.

Dr. Fred Oeder has sold his stock of drugs in East Des Moines to J. M. McClintock, of Adair, Iowa. Mr. McClintock is having the fixtures rearranged and will move them to Adair.

Harry Huegle, pharmacist, Des Moines, is getting to be quite an authority on fast horses. He is the owner of several fine roadsters, and takes great interest in trotting and pacing horses.

Dr. J. M. Paul, who for several years has been engaged in the drug business in Des Moines, is packing up his stock preparatory to moving to California, where he expects to open a pharmacy.

The city of Marion, Iowa, was visited by a disastrous fire Aug. 8. Among the businesses destroyed was the pharmacy of Lewis & Wilson. The loss was about \$5,000, insurance \$3,500.

S. G. Cogswell, who for several years was proprietor of the pharmacy now owned by Hufford Bros., Sixth and State streets, Des Moines, Ill., is clerking for M. J. McCullough, Sixth and Grand avenue.

M. J. Gardner of Ogden, Iowa, took in the Masonic ceremonies at the laying of the corner stone of the soldiers' monument at Des Moines. Mr. Gardner is a progressive and energetic pharmacist and has builded up a nice business.

In the late fire that nearly destroyed the whole business portion of the little city of Adair, the following drug firms were burned out: S. G. Wishart & Co., loss about \$3,500; insurance, \$1,500. J. M. McClintock, loss, \$7,500; insurance, \$2,000. Both will resume business as soon as possible.

A. O. McMichael, who for several years has conducted a pharmacy at 19th and

Grand avenue, Des Moines, was a member of the graduating class of the Iowa Medical College last spring. He is practicing medicine now and is working up considerable practice. He still conducts his drug store and takes a lively interest in matters pharmaceutical.

MICHIGAN.

DETROIT, Sept. 21.—The approach of the fall season has stimulated trade to a large extent. In many lines, especially those which are concerned in necessities, there has been an almost unprecedented rush. The passage of the tariff bill and the cool weather which this section of the country has been enjoying, have been factors.

MONEY EASIER.

Locally, business has received an impetus from the State Fair, which has been in session here for the past two weeks. Many of the customers of wholesale houses have deferred giving their orders until they could give them personally while the fair was on. It is much easier to borrow money than it was a few months ago. Collections are also easier, but wholesale dealers are still scanning their credits very carefully and there are no legitimate reasons yet why there should be an expansion of credits.

THE BUSINESS SITUATION.

Wholesale druggists are no exception to this rule, and doubtful customers do not get much satisfaction without the cold cash to back up their representations. From week to week a considerable number of small fry druggists file chattel mortgages, which is one result of too much credit all along the line. Those who are to be numbered among these unfortunates are for the greater part situated in the suburbs. The great majority of druggists of Detroit and Michigan have enjoyed a fairly profitable business during the past few months of commercial depression. There has been a large falling off in their sales of the more unnecessary articles, but the staples have been in good demand all the while.

DRUG INTERESTS OF DETROIT.

The *Detroit Free Press* recently stated the following concerning the drug interests of this city: "In no branch of the manufacturing industry is Detroit more widely or favorably known than in the production of drugs, chemicals, perfumes and medicines. It boasts the largest factory of this class in the world, with several others that also stand at the head in particular branches of the trade. These houses give employment to 1,620 people, about equally divided as regard to sex. They receive \$75,000 in monthly wages. The annual output is valued at \$5,800,000, and over \$2,000,000 is invested in the business.

A STARTLING ADVERTISEMENT.

Williams, Davis, Brooks & Company recently hit upon a novel advertising scheme which is said to have called the attention of the public to their "Liverettes" as no other means ever did. They made almost a fac-simile copy of the Postal Telegraph Company's blank with a few changes and the following message written upon it: "Mr. Blank—Sorry you are sick. Try a bottle of 'Liverettes.' They cured me of constipation, sick headache and biliousness. Will see you Sunday. GEORGE." It is said that 25,000 Detroiters were almost scared out of a week's growth by these fictitious tele

grams. The local telegraph companies were bothered all day long by kicks. The telegrams were delivered by perspiring American District Telegraph messengers. The members of the drug firm say they believe it a legitimate advertisement, but the telegraph company think they have infringed on the law.

DETROIT ITEMS.

Howard J. Pinkerton has discharged a chattel mortgage held by Max Lisberger.

Herbert H. Hoffmann has placed a chattel mortgage on his stock of drugs for \$255.

Charles T. Gustin has discharged a chattel mortgage on his stock held by T. H. Hinchman & Son.

Newlands A. Goodwin last week gave a chattel mortgage on his stock and fixtures for \$900 in favor of John E. Shepard.

Francis Loranger, 291 East Congress street, has filed a chattel mortgage on his stock of drugs for \$500 in favor of Minnie Loranger.

Peter G. Sauer has filed a chattel mortgage on his stock of drugs at 992 Gratiot avenue for \$275, in favor of Charles Henniker, Jr.

John B. Young, druggist at 118 Antoine street, has discharged a chattel mortgage for \$1,200 held by the wholesale drug firm of Farrand, Williams & Clark.

Sam Coulter, formerly traveling salesman for the Williamson Manufacturing Company, has been added to the traveling force of F. F. Ingram & Company.

A decided novelty at the State Fair now being held here, in soda fountain apparatus, is shown by Charles Lippencott & Company of Philadelphia. The tilting jar is the handsomest to be seen in this part of the country. B. M. Colver, the firm's representative in Michigan, was in charge.

In the show windows of the Detroit Pharmaceutical Company are the cut glass bottles which were on exhibition at the World's Fair. They are filled with Lazell's perfumes and are valued at \$5,000. It makes an exceedingly attractive display and many people stop to look and admire every day.

Andrew McFarland, the druggist, recently missed money from his cash drawer and suspected Dr. Ira B. Patterson of the offense. Some marked money was placed in the drawer and the physician was seen to go and take it out. He was arrested, but not until he and the druggist had had a pitched battle in the back room. He was allowed his freedom but furnished bail to the amount of \$300. When the time for his examination came the doctor failed to show up and his bail bond was declared forfeited.

STATE NEWS.

Woodland: L. E. Benson & Company have dissolved partnership.

Laingsberg: John Wert, the druggist, is seriously ill with rheumatism.

Merrill: The drug store of John Murray was recently entered and robbed of \$100 worth of goods.

Manistee: The Lynan Drug Company has just completed an extensive vault, which they will soon occupy.

Whitehall: C. F. Pitkin of this city has purchased the drug business of W. B. Conley and consolidated stocks.

Charlotte: H. A. Love, a former druggist in this city, has turned Populist and is engaged this Fall in giving stump speeches.

Grand Rapids: Swartz & Sons, the

Pearl street druggists, have given a bill of sale on their stock in favor of W. J. Remus for \$250.

Belding: George T. Owen has purchased an interest in the drug store of Charles Ives. The new firm now reads Ives & Owen.

Grand Rapids: Max Blank, druggist at 416 West Bridge street, has given a bill of sale of his stock and fixtures to Emil Riechel for \$500.

Lawton: Calvin Furnham, who has been with Gillis & Hamilton for the past year, has accepted a position with a Muskegon drug firm.

Jackson: The Brooks Drug Company has been redecorating and otherwise improving their store, which is now one of the handsomest in the Prison City.

Escanaba: William Godley's liabilities amount to about \$2,217.34. His assets, including the stock of merchandise, store fixtures, etc., will amount to \$2,947.36.

Escanaba: George Preston and Edward Voght will shortly open a drug store in the McKenna block. Both are experienced pharmacists and are bound to succeed.

Oxford: A. P. Lincoln has severed his connection with the drug firm of Tunstead & Howard, and has embarked in the drug business for himself at South Lyons.

Jackson: F. L. Henderson & Company of this city have been awarded eighth prize for the best display throughout the United States of the Best Tonic, manufactured by the Pabst Brewing Company.

Charlevoix: A. E. Mason and Arthur A. Miller have bought the drug stock of E. A. Beaman here and the new firm will read A. A. Miller & Company. Young Miller is a pharmacist of ability and the business is bound to succeed.

Manistee: The stock of drugs and groceries owned by the late George R. Scoville was recently sold at auction. The stock was bid in by E. A. Gardner & Co. for \$1,800, and they immediately opened the store for business.

Swartz Creek: T. A. Miller & Company of this village have purchased the store of D. E. Salisbury & Son. The two businesses will be consolidated. The former firm are druggists and the latter dealers in general merchandise.

Petokey: Arthur Miller, who has been in the drug store of G. M. Harwood for the last year, has in conjunction with A. E. Mason, bought the drug business of Mr. Beaman of Charlevoix and will continue in business in that place.

Lake View: This city recently suffered from a severe fire loss. Among the losers were E. Young, and C. F. Braden. Both were druggists. The former's loss will amount to \$1,500 and the latter's to \$1,800. Braden's insurance was \$1,000.

Menominee: The proprietors of the Eagle Pharmacy have dissolved partnership. Arthur T. Ellsworth disposed of his interest to L. D. Lewis and his son Chester Lewis. Mr. Ellsworth says he will either locate in Chicago or in Milwaukee.

Hancock: Dr. W. H. Dodge has foreclosed the mortgage held by him on the drug stock of Ligneel & Olander. This stock was formerly owned by Carl G. Printz. Messrs. Ligneel & Olander ascribe their embarrassment to poor business conditions.

Kalamazoo: C. W. Blake, one of the principal druggists here recently became engaged in a lawsuit. Constable Sweet

attempted to collect the costs but Mrs. Blake locked the officer out. He effected an entrance and began moving out the goods and showcases. Blake then backed down and settled up.

Saginaw: A merry war is being waged by the druggists of this city against the cut-raters. It was started by A. Loranger, who began as soon as he returned from Europe. He attracted considerable attention by his tactics and was rapidly drawing trade to his store. The rest of the fraternity decided to take up the gauntlet thrown down by him. The following firms met together and decided to meet the cut: D. E. Prall & Company, W. B. Moore, A. A. Schott, H. & W. Heim, G. W. Bruske and Henry Melchers. This is the first time in many years that anything of the kind has occurred in this city and the cut is being confined principally to proprietary articles and other lines outside of pure drugs.

The Michigan Association Meets.

DETROIT, September 19.—The Michigan State Pharmaceutical Association held a session here Tuesday, Wednesday, Thursday and Friday. President A. B. Stevens of Ann Arbor called the meeting to order, and Mayor Hasen S. Pingree gave the address of welcome. Hereafter to the drug business of Detroit as one of the leading industries of this city and went through the whole list of firms. Parke, Davis & Company, Williams, Davis, Brooks & Co., Frederick Stearns & Company, J. H. Hinchman & Company and Ferrand, Williams & Company he said, had no competitors in the country.

ADDRESS OF THE PRESIDENT.

President Stevens gave his annual address and called attention to the improvement in pharmaceutical literature during the last year and especially in the new U. S. pharmacopoeia. He advised the universal use of the metric system of weights and measures.

Secretary Thompson read his report, which showed that four members had died during the past year. The society is out of debt and has a small balance in the treasury. Papers were read on the loss to the trade by the deaths of F. C. L'Hommedieu, George Boehnlein of Detroit, and Dr. Eberbach of Ann Arbor. The association visited the various manufacturing in the city.

RESTRICTION OF DRUG STORES.

On Thursday James A. Vernor, of Detroit, read a paper which he placed before the attention of the A. P. A. The trouble with the retail drug trade, he thinks, lies in the fact that there is a pharmacist to every 160 inhabitants in America. In Italy there is one to every 2,800; in Switzerland, one to every 5,000 and in Germany to every 10,300. This is why the German pharmacist is so superior to the rest of his brethren. He says it is a great misfortune that pharmacists cannot use the initials of the American Pharmaceutical Association after their names, but the A. P. A. seemed to hurt the business of all who tried it. This is probably due to the fact that these letters stand for the name of a religious organization which takes considerable interest in politics.

OFFICERS ELECTED.

The election of officers resulted as follows: President, A. S. Parker, Detroit; vice-presidents, John E. Peck, of Grand Rapids, Dr. G. S. Ward, of St. Clair, and C. B. Colwell of Jackson; secretary, F. C.

Thompson, Detroit, and treasurer, William Dupont, Detroit. Five delegates to the A. P. A. will be appointed by the president.

MISSOURI.

ST. LOUIS, September 18.—The St. Louis Drug Clerks' Society met on the evening of Sept. 18; the meeting was called to order promptly at eight o'clock and it was nearly twelve before they adjourned. Fifteen new names were proposed for membership. The question of entertainment was taken up and every member present thoroughly ventilated himself as to his ideas of entertainment for this Winter. Many advocated having three or four balls during the Winter with a few euchre parties thrown in between; others said have the balls and euchre parties combined. Many members advocated having something in the way of entertainment at least every two weeks or even oftener, while others were very much opposed to this and believed in having one entertainment before the holidays and one after and let that settle it. It was finally decided to have a little social gathering at their quarters at the St. Louis College of Pharmacy some time before the first of October and to give a grand ball between the first and thirtieth of November.

A BURNING QUESTION.

The next question brought up made the fur fly. A number of the city salesmen of the St. Louis wholesale drug houses have been doing relief work, being registered pharmacists—evenings and Sundays, while there are quite a number of very competent registered clerks in the city who are out of employment on account of hard times and really deserve this relief work to help them make both ends meet. The city salesmen draw their regular salaries—and usually a very good one too—from their firms and do this work on the outside. When this question was open for discussion the boys got "red-headed" and if some of these salesmen who have been doing relief work could have been there it would not have been necessary for the Society to have drawn up those resolutions which they did, requesting the wholesale drug houses of the city to use their efforts in restraining their salesmen from robbing some of these unemployed, hardup drug clerks of a few dollars each week, but the resolutions were drawn up and sent to each drug firm in the city. R. H. Vitt, head clerk for Prof. Francis Hemm, was appointed by the Society to write up the proceedings each month for *The National Druggist* of this city.

WHAT THE DRUGGISTS ARE DOING.

H. O. Koenig, druggist at Euclid and Easton avenue, has started in to be an M. D.

Wm. Munstadt now has charge of the drug store at Broadway and North Market street.

G. W. Bell, Okmolgee, I. T., was in the city last week, buying goods and seeing the sights.

M. F. Faulkner came in from Rolla, Mo., to buy goods and visit the Exposition a few days ago.

Ed. H. Burkhardt is now at the head of the prescription department of the C. Schroeder Pharmacy.

Lewis F. Grewe, Ph.G. has resigned his position as prescription clerk for the Adam Roth Pharmacy.

Chas. Witt, Ph. G., head clerk for S. Boehm, has been spending a few days at his old home, Bellville, Ill.

The St. Louis College of Pharmacy will open on the 8th of October. Indications are for a very fair attendance.

Chas. Pendleton of Talequay, I. T., is spending a few days in the city, buying goods and visiting the Exposition.

C. E. Waldeck, Ph.G., has purchased the drug store formerly owned by E. C. Brenner, Page and Prairie avenue.

John Gray, Ph.G., class of '94, is now assistant prescription clerk at the Bartlett Pharmacy, 8301 Chestnut street.

R. E. Maupin, Ph.G., a prominent druggist of Pattonsburg, Mo., came down, and enters the Missouri Medical College to-day.

C. E. McDonald of the West End Hotel Pharmacy has been laid up with a stiff neck, etc., but is able to be about the store once more.

Theo. C. Bade, Ph. G., class of '93, sails for Australia in a few days. He intends to practice his profession in that distant land.

C. E. Henry, Ph. G., class '94, of Kirksville, Mo., leaves the city to-day for Philadelphia, where he will enter the Jefferson Medical College.

Watson Bros., prominent druggists of Garrison, Texas, were in the city the fore part of the month buying goods and taking in the sights.

H. W. Friedwald, druggist, at 3740 Choteau avenue, has moved his Notary Public office from his store down to Sixth and Chestnut streets.

Dr. V. Berry of Wagner, I. T. spent a week in St. Louis the fore part of the month buying drugs and taking a look at our new Union Station.

H. F. Helwig, Ph.G., 2200 Choteau avenue, spent the first two weeks of September in the East, visiting the prominent cities and points of interest.

Dr. Louis Crusius, the well known author of *The Funny Bone*, is a candidate for Congress from the Twelfth District, on the Socialists' Labor Ticket.

Ed. Mitchell, in charge of the traveling salesmen of the Meyer Bros. Drug Co., arrived home September 12 from his summer vacation spent in the West.

A. C. Bernsch, Ph.G., prescription clerk for F. H. Hecker, Compton avenue and Rutger street, expects to enter the Marion Simms Medical College in a few days.

All the medical colleges in St. Louis, of which we have thirteen institutions sailing under that name—are now open. The attendance is about the same as last year.

C. F. Geiger resigned his position as head clerk for C. Schroeder, 1400 Market street, and on September 7th took the management of the L. P. Hemm Pharmacy at Old Orchard, Mo.

Many unregistered St. Louis drug clerks are now burning "midnight oil" getting ready for that ever-dreaded examination of the Missouri Board of Pharmacy to be held in St. Louis October 8.

It is a singular fact, but true all the same, that no less than six bogus checks for sums ranging from five to fifty dollars have been cashed by St. Louis druggists during the last three months.

Chas. A. Lipps, president of the Alumni of the St. Louis College of Pharmacy has resigned his position with Mr. Chittendon and is now city salesman for the Daugherty-Crouch Drug Co.

Ed. C. Fritsche, of Leavenworth, Kan., was down the fore part of the month having the Dougherty-Crouch Drug Co. fit

him out a stock of drugs for his new store, which is said to be the finest thing in Leavenworth.

W. E. Blackwell, with Dr. Hoogan, 317 Lafayette avenue, and Henry Klippel, Esq., with C. F. Wilson, 1100 Autumn street, say they have had more fun this summer than all the other drug clerks in the city put together.

A sub-postoffice station was established at the drug store of Theo. F. Hagenaw, 1500 Choteau avenue, on the 15th of the month. Mr. Hagenaw is postmaster and his handsome clerk, E. W. Eberlin, Ph.G., is assistant P. M.

A. T. Fleishman, a member of our State Board of Pharmacy, landed in St. Louis a few days ago after an extended trip through Yellowstone Park and the West, in company with H. G. Clark, President of the Missouri Pacific Railway Company.

On Tuesday evening, October 9th, the St. Louis College of Pharmacy will be open and there will be some interesting features in the way of entertainment, and all medical and pharmaceutical students, their friends, and anyone interested are cordially invited to be present.

Albert H. Koch, Ph. G., head clerk for H. W. Barkhoffer, has just received a letter from Emiel Grebe, Ph. G., our gold medal prize student, class, '94, in which he states that he is just entering the University of Zurich, Switzerland, for a four years' course in chemistry. Mr. Grebe wished to be remembered to his many friends on this side of the water.

R. H. Gaertner, pharmacist, at 1400 Park avenue, is spending a two weeks vacation out among the mountains of Colorado and neighboring States. Reports have it that he recently climbed to the top of Pike's Peak and he accomplished it in the short time of twelve hours and fifty-nine seconds. Chas. Rehfeldt, Ph.G., had charge of the Gaertner pharmacy while the proprietor was out climbing the mountains.

G. H. Chas. Kile, chairman of the committee on papers and queries of the Missouri Pharmaceutical Association reports that fifteen prizes and eighty-five dollars in gold have already been contributed to the prize fund for papers, exhibits, etc. Many of the prizes were contributed with the subject of the paper for which they were to be given stipulated and it may interest some to know that the Tablet Triturate question seems to be the principal one suggested.

The Secretary of the Missouri Board of Pharmacy has induced a prominent St. Louis drug firm to get up a collection of one hundred specimens of crude drugs, consisting of roots, barks, flowers, seeds, gums, etc., for self-instruction in pharmacognosy, and especially to enable students to identify the most common crude official drugs when they go before the State Board for examination. The specimens are packed in small boxes and sold at a very small margin above the actual cost to the firm, thus placing them within the reach of every poorly paid drug clerk. Mr. Sennewald was prompted to take this action by the fact that a large per cent. of those who fail at the State Board examination are especially weak on the recognition of crude drugs, owing to the fact that drugs are now procured already ground for percolation.

Prof. C. M. Ford of the Denver College of Pharmacy has been spending a few days in St. Louis on his way home from the A. P. A. meeting at Asheville. Yesterday afternoon quite a number of lead

ing druggists met the professor at a downtown café, and after an hour at Tony Faust's they proceeded to take in the town, visiting the Exposition, College of Pharmacy, medical colleges and other points of interest. While the pharmacists were trying to convince the professor that St. Louis was the metropolis of the United States, he, with the small St. Louis delegation who attended the meeting at Asheville, succeeded in making those who missed the meeting wish they had let everything else go and been there with the rest of the progressive druggists, and to vow that they will never miss another meeting. If all of them keep their promises—and druggists always do that—Denver had better be increasing her hotel facilities, for St. Louis druggists don't like to be crowded, even for old accounts.

A little incident was reported to your correspondent a few days ago which shows how business is done in some drug stores, even in St. Louis. A physician of high repute called on a patient and left a prescription—a solution of morphine containing one-eighth grain to the dose—with directions to have it filled at a certain drug store in the neighborhood which is noted for its high grade prescription department. A little girl was sent with the prescription but went to the wrong store. She handed the prescription to a young clerk of a few months' experience, who said the proprietor was out but that he would fill it all right, which he pretended to do, and in handing the girl the bottle he gave her a card bearing the name of a certain physician living in the neighborhood, and told her that hereafter when they wanted a doctor to send for this one and not for the one who had written the prescription, as he was not a reliable doctor and they ought not to employ him. He told her to go home and tell her mother this, which she did. The medicine was taken all night as directed but without the slightest effect and upon being analyzed by the physician the next day was found to contain syrup and water but no morphine. Of course the physician was informed of what had transpired and the reader can imagine the consequences.

ILLINOIS.

CHICAGO, Sept. 24.—Peter Van Schaack, of the well known firm of Van Schaack & Sons, has followed the example set by his old partner Robert Stevenson, of the firm of Robert Stevenson & Co., in taking a European trip. Mr. Van Schaack deserves the rest that a sojourn from his place of business will afford him, as he has been a most energetic worker, and indefatigable in all his efforts to further the interests of the retail drug trade of Chicago and vicinity.

Percy Fitzgerald, of Morrisson, Plummer & Co., reports business as being vastly better during the past month than during a similar period of any prior year in their experience.

Jesse L. Hopkins & Co., of 14 Platt street, New York, are to open an office in Chicago about the first of October.

Morrison, Plummer & Co. and Lord Owen & Co. will be represented at the N. W. D. A. meeting in New York.

Mr. Peters, of the Fuller & Fuller Co., looks forward to a bright and prosperous fall business. The firm have increased their line of sundry goods during the past few months and have today perhaps the largest display of druggists' articles and perfumes, in the West.

Robert Stevenson, of the firm of Robert Stevenson & Co., has just returned to his desk after a delightful and pleasant trip to the old country. Mr. Stevenson speaks enthusiastically of the pleasant treatment which he received during his absence. He enjoyed every minute of his stay away, but after all he is glad to get back to the City by the Lake.

B. M. Butler, successor to Morrisson Plummer & Co., in their pharmaceutical laboratory has been so busy during the past month that while new business is always acceptable he has felt as if he would rather it would hold off until October. Mr. Butler is one of the most energetic men of the West, and that success has followed his efforts is only natural.

R. E. Rhode, of West Chicago, says that the cutters do not trouble him although there are a number in his vicinity, he also says that he finds in his experience a large number of so-called pharmacists who ought to be behind the bar rather than dispensing drugs as they are no more fitted to do so than a new-born babe, and the mistakes made day by day, while not always of a serious nature, are becoming so well known thereby causing little fear from the so-called competition in the vicinity.

Bayard, the story teller fiend, who represents the I. Calvin Schafer fruit juices, has returned to Chicago from his sojourn at the sea shore with his family. The boys are always glad to see Bayard because each time he makes his appearance he has some new yarn to unfold; his latest one is about the Englishman who arrived at the Tremont House and asked for a "helster." No one seemed to understand what the Englishman was looking for, but after considerable difficulty it was discovered that he was looking for the elevator. Every time Bayard tells the story he gets a cigar or two. It is surmised that he is laying up a supply of cigars for the winter.

Lewis, our stout friend who sells plasters, etc., for Johnson & Johnson, reports business out of sight, "something like 50 gross of belladonna plasters sold during the last 24 hours," is what he told your correspondent and he took it all down without anything on the outside. Lewis is a nice young man, as everybody knows, but oh, my! how he does yarn it. 50 gross in Chicago, 20 gross in Milwaukee, 30 gross in St. Louis, 20 gross in Louisville, and Cincinnati yet to be heard from. R. W. J. is going to build another factory. Speaking of the last mentioned gentleman, R. W. Johnson passed through Chicago on his return to New York, after a short vacation spent among the Rocky Mountains.

STATE NEWS.

W. Cleary, of Odell, Ill., has sold his drug store and will go to California for his health.

Harry Hall, the druggist, has moved into his new store, Y. M. C. A. building, Danville, Ill.

Victor Brownell, a Chicago druggist, and Miss Ethel B. Lyman, of Pana, Ill., were married recently.

Spohr & Stewart, the West State Street druggists, Rockford, Ill., anticipate moving their drug stock to Mason City, Iowa.

The store room formerly occupied by Mr. Dodson, Bloomington, Ill., has been rented and will be occupied by a drug store known as the "Corn Belt Drug Store." R. H. Dawson, an experienced pharmacist, will be in charge.

Will Herman, of Corbus Drug Store,

La Salle, Ill., returned from Chicago recently, having passed with a high average the examinations which admit him to a license as assistant pharmacist.

The Sawyer Drug Co.'s exhibit of druggists articles and perfumes, Rockford, Ill., is the cynosure of many eyes. It is a fine display and attracts deserved attention.

G. Franks has resigned his position at Baker & Co.'s drug store, La Salle, Ill., and has gone to Chicago to attend the Illinois College of Pharmacy. Miss Mollie Clancy is acting as clerk for the present.

An entrance was effected recently by breaking a pane of glass in the rear of Haering's East Grove Street pharmacy between the hours of 5 and 6 P. M., while the clerk was away to supper. The cash register was robbed which contained about \$50.

Illinois Board of Pharmacy.

At a meeting of the State Board of Pharmacy, Illinois, held in Chicago, Sept. 4-7, 1894, the following persons were granted registration as registered pharmacists by examination, out of a class of forty-eight applicants:

George H. Benton, George Bollinger, Herman A. Brennecke, Charles C. Cook, John Micklek, Edward G. Watt, John Wetretter and William A. Zecharski, all of Chicago.

The following resolution was adopted:

Resolved, That the State Board of Pharmacy, Illinois, abolish special emergency examinations from and after Sept. 7, 1894, and that the Board hold two or more regular examinations annually in the City of Springfield, upon such dates as may hereafter be fixed by the Board, which provision is calculated to accommodate the Southern and Central portions of the State, and which shall not interfere with the usual regular examinations to be held in Chicago.

The following resolution was adopted:

Resolved, By the State board of Pharmacy, Illinois, that as section one of the pharmacy law requires that every drug store in Illinois, must be under the direct charge of a registered pharmacist of Illinois, with the exception made in section eight, which provides that "Any Assistant Pharmacist (of Illinois) shall have the right to act as clerk or salesman in a drug store or pharmacy during the temporary absence of the owner or manager." The Board of Pharmacy construes the words "temporary absence" to mean that the assistant pharmacist may have charge of the store only while the registered pharmacist has gone to his meals or any other like necessary duty requiring no more time than is generally so consumed, and does not mean that the assistant pharmacist can take charge of the drug store or pharmacy for a half day or a day at a time, the expressed intention of section one of the pharmacy law being to keep every drug store or pharmacy under the immediate charge and supervision of a registered pharmacist during all the time the drug store or pharmacy is open for business.

The next regular meeting of the Board for examination will be held at 178 89th street, Chicago, Nov. 13, 1894. There will be a regular examination held in Springfield some time in Jan., 1895.

NEBRASKA.

H. M. Bailey, the Glenville druggist, has sold out.

The Nebraska City druggists have all signed an agreement to close at 9 P.M.

Creditors recently closed the drug store of S. S. Buckem at Wallace on a chattel mortgage.

Hugh Duncan is now traveling in South Nebraska for the H. T. Clark Drug Co., of Lincoln.

Mr. Todd, of the firm of Todd & Lewis, druggists, Alliance, is opening up their stock at Gering.

C. Grabenstein has sold his drug store at Eustis and will give possession the first of next month.

Dr. Bailef has sold his drug stock at Glenville to Van Brundt & Son of Edgar. The son will conduct the business.

Homier Wait has disposed of his interest in the City Drug Store at Elwood to Mr. Jeffrey, his partner, and will remove to some point in Colorado, where he will again embark in the drug business.

The drug store of C. E. McCheaney, at Hartington, has been sold to the Ginney Drug Co., a corporation with a capital stock of \$10,000. The amount paid up is \$5,000. Howard P. McGinney, the president of the new company, will conduct the business. Dr. McCheaney will remain in Hartington and resume the practice of medicine.

WESTERN NOTES.

R. B. Stoddard, of Hampton, Ia., has moved his store from the Pickering lot to the corner opposite the hotel, which he has leased from the Railroad Company. When completed it will be occupied by Frank Gregory as a drug store.

For the first time in many years St. Clairsville, O., was visited by burglars who entered the drug store of J. B. Hoge where they carried off cigars, liquors, tobacco and a small sum of money. The post-office was also robbed of \$10.

J. B. Robertson's drug and jewelry store, Cottonwood, Minn., was recently entered by burglars, and silverware, jewelry, cigars, and other articles amounting to about \$150 were taken. Considerable money was in the safe, which was not touched.

The stock and fixtures of the Palace drug store, La Crosse, Wis., were recently purchased by the wholesale druggist, T. H. T. Spence. He will probably remove his stock to the Palace and continue the retail business at the new stand.

John A. Schneider, of Haselton, O., and Miss Katherine Williams, of Weathersfield, O., were married recently.

The City of Unionville, Mo., is said to have more drug stores to her population than any city in the world.

W. R. Nichols of Beaver Crossing has leased a building in Emerson, Ia., and will put in a new drug store.

Frank Warwick, who for the past month has been acting as salesman in the Cline Pharmacy, Athens, O., left recently for his home in Lucasville, where he will spend a month. On October 1st he will go to Cincinnati to take a course in the Cincinnati Dental College.

RICHMOND NOTES.

Mr. Gibbony is now clerking in the Broad Street Pharmacy, 5th and Broad streets.

Mr. W. E. Shaver is now clerking for the Shield Drug Co., 5th and Marshall streets.

The Shield Drug Co. has been lately organized. It occupies the store at 5th and Marshall streets.

The University College of Medicine and the Medical College of Virginia, began their sessions on Sept. 18.

W. A. Huddleston has purchased the Park Place Pharmacy, corner Belvedere and Main streets. It is conducted by F. M. Reade.

The party of New York druggists who contemplated a stop over in Richmond en route to the A. P. A. meeting at Asheville, N. C., caused the druggists of this city no little disappointment by not doing so.

Dr. Hunter McGuire has acquired a well deserved reputation, one evidence of which we hear is that while away in England he was called to Austria to perform an operation upon a patient in that country; so far had his fame preceded him.

Wisconsin Board of Pharmacy.

The regular meeting of the Board was held in Racine on August 18th and 19th. Certificates were granted by exchange to Christian Koerner, of Milwaukee, and J. A. Cooper, of Rhinelander, from Illinois; Lars Urheim, of Eau Claire, and Axel Spies, of Washburn, from Minnesota; E. E. Fulton, of West Superior, from Iowa.

First grade or licentiate certificates were granted to: L. A. McKnight, Fond du Lac; A. S. Hipke, Chilton; E. S. Hebbard, La Crosse; A. C. Marquart, Sauk City; M. D. Lonergan, Green Bay; F. Eggart, Jr., Manitowoc; Henry C. Werner, Paul Ahnest, F. J. Lasurbeck, C. H. Polnisch, E. W. Krambs, Milwaukee.

Assistant or second grade licenses were granted to: F. J. H. Esser, F. X. Stetter, Alexander Bingel, Charles L. Waasweller, B. T. De Hassen, O. B. Graf, A. J. Krinets, F. E. R. Goetz, Milwaukee; F. M. Drexler, Oshkosh; F. W. A. Christensen, Racine; L. B. Stinelke, Oshkosh; E. E. Kalpin, Berlin; J. J. Pelikan, Racine; James W. Pryor, Dodgeville; A. F. Ackerman, Plymouth; Louis E. Fazin, Racine. Eighteen applicants were rejected. The next meeting of the Board will be held at the Pfister Hotel, Wednesday, Nov. 14th.

The American Pharmaceutical Association.

THE SOCIAL FEATURES.

As the incoming trains neared the city of Asheville from whatever quarter they were boarded by members of the local committee of entertainment, who introducing themselves proceeded to extend a hearty welcome to their incoming guests. Having once come within the protecting aegis of this hospitality all care was warded off until the city had been left behind; that is all care except for that ever present minority, who having been born under Saturn have never succeeded in shaking off his malign influence. These are the unfortunate mortals who get inside rooms on steamers, are put in the garret at the hotels, are served last at the table and whose trunks always get lost on the railroads. The major portion of these soon recovered their equanimity under the genial urbanity of Manager McKissick of the Battery Park Hotel.

Arriving at the hotel the visitors were soon introduced to Nat. S. Rogers, secretary of the citizens committee on entertainment, at three dollars per introduction. But it was worth the money, for with that

introduction was included a plentiful supply of badges, ribbons, tickets programmes, etc.

The programme of the week was most tastily gotten up both from a literary and a mechanical point of view. The soft bluish gray cover bore on it the words "What we are here for." The interior of the booklet containing numerous excellent illustrations of scenery in and about the city, and the programme, was interspersed with numerous appropriate and poetical quotations which showed the literary taste of Mr. Rogers of the citizens committee.

Jos. N. Hurty of Indianapolis made a very happy little speech in acknowledging his election as vice-president.

A trip to Mt. Mitchell was taken after the meeting by Dr. and Mrs. R. G. Eccles of Brooklyn, Joseph Helfman of Detroit, Prof. A. E. Ebert of Chicago, Dr. Geo. F. Payne of Atlanta, Messrs. Meistner of Detroit; Eliel of South Bend, Ind.; Bruun of Chicago, and Erchlicher of Pekin, Ill.

Captain Whitfoord G. Smith, the local secretary, displayed a degree of energy and self-sacrifice which was a very important factor in the comfort and pleasure of the members. His modest and unassuming bearing gives but little indication of the energy and enterprise, which he displays in all the varied relations of life.

George J. Seabury as a presiding officer is undoubtedly *sans peur*, though from a rigidly parliamentary point of view his rulings may not be *sans reproche*. The most turbulent and obstreperous, even those from the wild and woolly West are compelled to subside under the vigorous exercise of Mr. Seabury's gavel and of his stentorian voice.

Mayor T. W. Patton of Asheville, chairman of the citizens entertainment committee, devoted himself most assiduously to the entertainment of the association. The geniality shown by Mayor Patton is a family characteristic which has long since come to the notice of the members of the association through its manifestations in the person of "Uncle John" Patton of York, Pa., a far-away cousin of the Mayor.

Nat. S. Rogers, secretary of the citizens committee on entertainment, though a Bostonian by birth, has become so enthusiastic in his devotion to the fortunes of Asheville that he made a martyr of himself in his endeavors to look out for the comfort and welfare of the visitors. Mr. Rogers is a man of action, but in the few instances where an announcement was to be made he made it in an easy and confident manner.

A number of the visitors remained to enjoy the beauties of the Asheville scenery in a more leisurely manner, after the great body had gone. Among these were Mr. and Mrs. Chas. Dohme, Dr. Alfred Dohme and Miss Alma Dohme of Baltimore, Mr. and Mrs. S. A. D. Sheppard of Boston, Mr. and Mrs. J. J. Ingalls of Macon and their guest, Miss Lucille Johnson of Charleston, Mr. and Mrs. J. H. Stein and the Misses Stein of Reading, Pa., Mr. and Mrs. M. W. Alexander and Guy R. Alexander, and Dr. and Mrs. Whelpley of St. Louis.

One of the most delightful affairs of the meeting was a little dinner given by Jos. Jacobs of Atlanta to several gentlemen of the association. The menu was unique, presenting as it did a distinctively old-fashioned southern dinner. The dishes were a credit to the chef who prepared them as the idea and its execution was to the taste of Mr. Jacobs. The dinner was

served at a round table, the centerpiece of which was a magnificent pyramid of fruits. The dinner opened with "peach and honey" and closed with a smoke through Crowhatan Indian clay pipes with long stems. Under each guest's plate was a ten dollar Confederate bill and a handsome scarf pin containing some native North Carolina gem, some being beryl, some amethyst and others of smoky moon-stone. The names of the guests were printed on the menu and included Messrs. Polk Miller of Richmond, J. P. Remington of Philadelphia, F. E. Stewart of Delaware, John Ingalls of Georgia, L. E. Sayre of Kansas, C. S. N. Hallberg of Chicago, Arthur Nattans of Washington, T. Roberts Baker of Richmond, Wm. Simpson of North Carolina, and Caswell A. Mayo of New York.

THE GODS OF OLYMPUS.

After the adjournment of the meeting, all united in singing Auld Lang Syne, and brief parting speeches were made by the local secretary, Captain Whitefoord G. Smith, W. C. Alpers, of New Jersey, and others. Mr. Alpers said: "During the past week I have thought more than once that we were removed from all earthly care and worry; that in this 'Land of the Sky' we lived like those happy creatures of ancient imagination, the old Grecian gods. They lived in Olympus, above the clouds, always happy, always enjoying themselves. Have we not done the same? And have we not all the ancient gods among us? Let me introduce them to you.

"There is, in the first place, the ruler of Olympus, the highest of all the gods. He has a watchful eye over Olympus; in his hands he holds the gavel of lightning, ready to hurl it at any unruly or talkative member. From his lips flows a wonderful speech as gentle as it is commanding, touching our hearts like poetry, he the sublime—Jupiter Splendens from Boston, [retiring President E. L. Patch].

"Next we see him, the cheerful god, whose eyes are a perpetual smile, a joke on his lips. As the god of old handed to suffering mankind the cup that cheers, so this god gives us a healing plaster for every ill and envelops human frailty in lint and gauze. Who does not know him, the joking god?—Dionysius Bacchus from New York [Geo. J. Seabury].

"And near him lives the skillful god, experienced in herbs and roots and the mysteries of bacterial life; he who invites the bacillus and fungus to sit at his table, and carries the bacterium of education in his pocket to inoculate it on our colleges and knock boards of pharmacy silly. He who isolated the bacillus of distance and space so that distance has become a lost art, and hails alike from New York and California; the skillful Dr. Æsculapius from Brooklyn [Dr. R. G. Eccles].

"Further, we have with us the knowing god, whose head shines in radiant splendor and enlightens everything that is dark in pharmacy. His name and fame are known in both hemispheres and his speech is powerful in debate, but pleasant and gentle in social intercourse; he is beloved by all—the Sun of pharmacy—Phœbus Apollo from Philadelphia [Prof. Jos. P. Remington].

"And who does not know the true hearted but powerful God who defies the conveyances of modern civilization and happily strides through the land? He climbs the highest mountain and descends into the depths of the gorge. He sleeps with the mountaineer and hunts the bear in the thicket and wrestles with the Hydra of

North Carolina, the rattlesnake—he, the truest of friends and best of companions—Hercules from Baltimore [Dr. Wm. Simon].

"And we see before us the busy god, our messenger, who flies before us on the wings of steam and electricity, who provides for our comfort in the land of the sky, and places ambrosia and nectar on our table, he—Hermes Mercurius of Asheville [Capt. W. G. Smith].

"And what shall I say of those two powerful gods who are neighbors but not friends. Between them sits the green-eyed monster, they are jealous of each other, for both court the same lovely maiden, Dame Pharmacy, and when she smiles on one the other chides and scolds her. But they are great workers. The one sits in the quiet of his study, we do not see him, but we see the flying sparks of his powerful mind and hear the ticks of his think-works; the other one with the strength of the steer and the persistency of the bull-dog—hurls his spear and wields his sword where the battle is thickest—they—the skillful Vulcanus [Prof. Oscar Oldberg] and the warlike Mars [Prof. C. N. S. Hallberg] both from Chicago.

"And we smaller gods look up to these powerful brethren in awe and admiration and are happy to be allowed to sit at their table and feast with them. And I see around us our goddesses, who like a radiant wreath of beauty and grace adorn Olympus. I see the large eyed Juno and the highbrowed thoughtful Pallas Athene, Venus the lovely and the coy Diana, and the numerous smaller goddesses, all full of mirth and happiness. And Cupid the artful flies among them, shooting his arrow here and there, and I am afraid that many a sweetly wounded heart will be taken home.

"Below us we see the poor mortals toiling and worrying, those unfortunate beings that are not Pharmacists, that are not gods. We look down on them with pity and prepare for them the tinctures of recreation and the pills of comfort. Therefore—fellow gods and goddesses, let us be thankful for this stay in the Olympus, let us be happy and cheerful in the 'Land of the Sky.'"

MEMBERS IN REVIEW.

The local newspaper paid its respects to the visiting members in different ways. M. W. Alexander, for example was referred to as "the best speaker in the Association," and "the Chauncey Depew of Pike County." Other comments were as follows:

J. H. Bobbitt, President of the North Carolina State Association, is a heavy-weight. He is also a man who has friends wherever he goes.

Louis C. Hopp and George H. Heckler, of Cleveland, Ohio, are the Damon and Pythias of the Association.

George W. Kennedy, of Pottsville, Pa., is a State senator, and secretary of the council of the Association.

Leo Eliel, of South Bend, Ind., is known as the man of polka dot fame, because of a tie he wore at the Detroit meeting years ago.

F. R. Butler, of the New England delegation, is one of the best informed of Massachusetts pharmacists, and Secretary of the State Board of Pharmacy.

H. M. Whitney, of Massachusetts, was local secretary two years ago at the White Mountain meeting, and was as popular as White Smith, which is saying a good deal.

Thos. F. Main is president of the firm of Tarrant & Co., of New York, and is an active member of the National Wholesale Druggists' Association as well as the A. P. A.

Dr. R. G. Eccles, of Brooklyn, is a man who shows up all the frauds of the patent medicine world. He has great ability in chemistry, and has done much for the profession.

W. S. Thompson, of Washington, is a man whose personal appearance attracts attention at every convention. He is polished in his manners, is strictly business, and has many friends.

L. F. Chalin, of New Orleans, is an ex-president of the Louisiana association, is a genial whole-souled druggist. He acted as guide for the Association when it met in his city a few years ago.

Prof. Edgar L. Patch, of Boston, the retiring president of the Association, is a self-made man, and one of great thoroughness and application. His address this year was one of the finest ever given.

Chears, of Plymouth, he of the black Vandyke, say that just because the visitors are pharmacists they are not necessarily prepared to furnish farm assistants to all the agriculturalists who apply for hired help.

Paul G. Schuh, from Cairo, Ill., is known for his peculiarly hearty handshake, but kicks when he strikes a man who carries a nutmeg grater in his hand, as George J. Seabury did once when Schuh tried his grip on him.

Hancock, of Oxford, was so deeply impressed with Vanderbilt's palace that he is anxious to have it secured by the Association as a home for aged and infirm druggists. He says that with a few changes and additions it would do first rate.

Dr. Alfred R. L. Dohme, of Baltimore, the new chairman of the scientific section, is the youngest man ever accorded the honor of being elected to this important position. He is a Ph. D. of Johns Hopkins University, and studied abroad for two years.

Henry Kraemer, of New York, is the student of the Association. He is Reporter of Progress in Pharmacy, and his work in this line is especially noteworthy. Just now he is devoting his time to the study of botany in Western North Carolina—and finds other attractions besides.

Dr. Wm. Simon is one of the most popular men in the Association. He is professor of chemistry in the Maryland College of Pharmacy at Baltimore. His visit to Asheville began before the convention, and he has been there frequently, being fond of tramping through the mountains.

Chas. Caspari, Jr., professor of pharmacy in the Maryland College of Pharmacy and the newly elected secretary, is an honorary member of the North Carolina association, and attends all the State meetings. He is very partial to North Carolina, and spends considerable time here.

In a voting contest at the Battery Park, after the convention, Miss Helen Gordon of Cincinnati was voted the most popular young lady. H. R. Chears of Plymouth was voted the most popular man. Mr. Chears has made himself indispensable to both visitors and entertainers. He is manager in the Southern States for Wm. R. Warner & Co., manufacturing chemists, Philadelphia. He has made many friends during the convention who will be of value in a business way.

J. U. Lloyd, of Cincinnati, is an authority the world over of alkali-Lloyds.

Among the traveling men at the convention who were also pharmacists were Messrs. Sprague and Pryor of Sharp & Dohme, Baltimore; Messrs. Bird, Ryan and Hancock of Parke, Davis & Co., Detroit; S. P. Watson of Schieffelin & Co., New York, and H. R. Cheers of Wm. R. Warner & Co., Philadelphia.

Among the very attractive young ladies whose presence has graced the social gatherings during the week are Miss Helen Gordon, of Cincinnati, the Misses Seabury, of New York, the Misses Stein, three in number, of Reading, Pa., Miss Flora Holmes, of Elmira, N. Y., Miss Main, of New York, Miss Flora A. Jones, of South Bend, Ind., Miss Bessie Johnson, of Boston, Miss Lucile Johnson, of Charleston, S. C., and Miss Alma Dohme, of Baltimore.

Obituary.

Prof. Helmholtz.

Hermann Ludwig Ferdinand von Helmholtz, the celebrated German physiologist and natural philosopher, the most distinguished man of his day in his special field of research, is dead.

Professor Helmholtz won great fame as a mathematician and published many important works on this subject in connection with the study of electrodynamics.

He invented the method of analyzing sound, thereby furnishing a means of acquiring knowledge not thought of until then. This invention consisted essentially in the use of hollow bodies, called resonators, the volume of air in which vibrates in the presence of a sound previously determined. These resonators solved many puzzling questions. Helmholtz discovered that the difference of quality or timbre of the sounds of different musical instruments is due to the fact that different compound tones may contain the same fundamental tone, but differently mixed with other tones. He also discovered the acoustic cause of the vowel sounds of human speech, and not only analyzed them into their constituent elementary tones, but also artificially produced vowel sounds from the elementary tones of tuning forks.

His great work on the "Handbuch der Physiologischen Optik," was published in 1867.

On the occasion of Helmholtz's seventieth birthday anniversary in 1891 he received honors which few men have won. Addresses, honorary titles, and presents were showered upon him seemingly in endless procession. Every civilized land paid its tribute to his genius. A celebration was given in his honor jointly with that of Virchow, who was also 70 years old the same year, when the greatest sons of Germany joined in singing the praises of the two men who stood at the head of science.

Helmholtz came to this country last year to see the World's Fair, and delivered a lecture on his discovery of the ophthalmoscope at the College of Physicians and Surgeons of New York, on Oct. 8. He spoke in English, and the many persons who had gathered to hear him listened with rapt attention. He remained here several days, and many receptions were given in honor of himself and his wife.

Josiah Parsons Cooke.

Josiah Parsons Cooke, Erving professor of mineralogy and chemistry at Harvard University died at Newport on Sept. 8, after an illness of some length.

Prof. Cooke was born in Boston Oct. 12, 1837. He entered Harvard College in 1855 and graduated with the class of 1858. In the following year he was appointed an instructor, and two years later, in 1861, Erving professor, to succeed John White Webster, who had been hanged for the murder of Parkman.

He was married about 35 years ago and his wife survives him; there are no children. At the time that Prof. Cooke entered upon his duties as head of the chemistry department at Harvard the methods of instruction were of the most rudimentary sort. Students were only required to attend lectures illustrated by a few experiments, laboratory work being deemed unnecessary. The credit for the change which was made at this institution as well as at other American colleges, is very largely due to the deceased.

Professor Cooke was made an L.L.D. by the University of Cambridge in 1892. He was a member of the American Academy of Arts and Sciences, an institution which no man did more to support than he.

Professor Cooke was a cultivated man, whose attention was directed to many things outside of his own profession. One of his last published papers was written to recommend that scientific men should be educated more broadly. He was always a disbeliever in an exclusively scientific education.

Few men were better known about the college than Professor Cooke. To the more recent generation of undergraduates he seemed always a venerable figure, as being one of those earlier Harvard professors—like Prof. Child and Prof. Norton—who had taught in the old Harvard which existed before the war, and had continued to teach in the modern university which they had helped President Eliot to create.

He was the author of a number of books, pamphlets, and scientific papers. Perhaps the best known of his books was his "Religion and Chemistry," brought out in 1864, which maintained that the designs of a higher intelligence were to be discovered in the province of chemistry. Among other books were "The Elements of Chemical Physics," "The Principles of Chemical Philosophy," and "Scientific Culture."

Baron von Mueller has just received a distinction which is peculiarly coveted, we believe, by men of science, and is valued by them next to the gold medal of the Royal Society of England. He has been elected a member of the French Institute, in succession to Alphonse de Candolle, the famous botanist, recently deceased. The institute embraces the five academies within its organization, and is one of the essential elements of intellectual work and progress in France, and to belong to it is a patent of literary, artistic, or scientific nobility. So far as we know, the Baron is the first person living south of the equator upon whom the honor has been conferred since the foundation of the institute on the 25th of October, 1795.

The Supply of Gum Catheters.*

Until recently France, Germany, and England seem to have supplied the greater part of the gum catheters and bougies used in different parts of the world. The first large manufactory of catheters in England was established many years ago by a German, Mr. Eschmann, whose suc-

cessors are still engaged in the extensive manufacture of these instruments. About fifty years ago, says Mr. Stohlmann, soft catheters and bougies were manufactured in the United States by a Frenchman, Mr. Petrie, who had established himself in Philadelphia but soon gave up the business because the demand for his instruments was too limited, on account perhaps of their being inferior to those imported from France. From that time it does not appear that any attempt was made to manufacture gum catheters in this country until the year 1879, when Mr. Roy, son-in-law of Mr. Bénas, of Paris, established a catheter factory in one of the suburbs of New York, and continued to supply, to a limited extent, the demand for gum catheters until 1890, when his establishment was closed. Thus far the home manufacture of these catheters had affected but little the importation of French, English and German catheters.

It has not been possible to obtain strictly accurate information relating to the importation, home manufacture, and consumption of soft catheters and bougies, but some of the merchants and manufacturers assert that the annual sale is about one million soft catheters, of which two hundred thousand are of India-rubber, and one hundred and ten thousand bougies. Until the end of 1875 nearly all the soft vulcanized India-rubber catheters used in this country were imported. In 1876 the firm of George Tiemann & Co., of New York, began the manufacture of India-rubber catheters with counter-sunk blunt-edged eyes under the name of velvet-eyed catheters, and also some catheters of the same material with no lateral eye, but open at the vesical end. The following named firms have since been engaged in the manufacture of soft-rubber catheters: The Davidson Rubber Co.; Parker, Stearns & Sutton; The Akron Rubber Co.; The Tyer Rubber Co.; and several other companies. At present, of the 200,000 India-rubber catheters sold annually in the United States, only 30,000 are imported.

Pharmacy in Korea.

A "Pall Mall Budget" correspondent, in an article entitled "A Peep at Soul" (Soul, or Seoul, is the capital of the "Hermit Kingdom," in which the contending Japanese and Chinese are now achieving their Munchausian victories), gives some interesting particulars of the condition of pharmacy in Corea.

"The Koreans," says the writer, "take a great deal of medicine (those who can afford it), and it never seems to do them any harm. For the rich pills of incredible size are thickly gilded and placed in elaborate boxes. The poor take smaller pills, ungilded, and omit the boxes altogether. Very many Koreans take medicine at stated intervals without the slightest reference to their state of health at the time. These systematic persons do not take medicine when they are ill, unless the illness has the good taste to fall upon their duly-appointed medicine-day. This is how an old Korean explained to me the philosophy of the medicine-regularly-taken theory: 'On every seventh day you rest whether you are tired or not; and on all the other days you work whether you are tired or not. So do we take our medicine once in so many moons, because it is well to observe system—to be regular.' The old man's eye twinkled finely as he spoke, as who should say, 'What, are you answered now?' and I rather felt that he had me on the hip."

Mr. Percival Lowell, from whose inter-

* From an article by J. W. S. Gouley, M.D., in the N. Y. Medical Journal, quoted in the India Rubber World for August.

esting book, "Choson, the Land of the Morning Calm" (published by Messrs. Houghton, Mifflin & Co., of Boston), says on the same subject: "In Korea medicine is an heirloom from hoary antiquity. An apothecary's shop there needs not to adorn itself with external and irrelevant charms like the beautiful purple jar that so deceived poor little Rosamond. Upon eminent respectability alone it bases its claim to custom; and its traditions are certainly convincing. Painted upon suitable spots along the front of the building runs the legend, 'SIN NONG YU OP'—that is, 'The profession left behind by Sin Nong.' This eminent person was a 'spiritual agriculturist,' the discoverer of both agriculture and medicine; and the pills sold in the shops to-day are supposed to be the counterparts of those invented by him. Worthily to render the legend we ought to translate it, 'Jones, successor to Aesculapius.'"

Surgery is more advanced in Korea than in China, less advanced than in Japan. Both surgery and medicine are very much in awe of royalty. Indeed, the person of his Majesty is so sacred that surgery itself cannot approach him, and its very name may scarcely be spoken in his presence. It is high treason to touch with any sharp instrument the person of the king, and not so very many years ago a Korean king died rather than undergo a trifling operation, not because he feared the knife, but because he would not suffer it at the hand of a subject—a subject who happened to be his favorite physician. And within the palace gates even medicine itself is a very perfumed, gilded thing indeed. —Chemist and Druggist.

Introducing Whiskeys.

The firm of Jos. Fleming & Son, bottlers of high grade whiskeys, 413 Market street, Pittsburg, Pa., have adopted a remarkably successful method of introducing their high grade malt and rye whiskeys to the notice of the medical profession, which consists practically of the distribution to physicians of miniature samples of the two chief blends. These samples are sent out by the druggist, who receives one dozen with each case of quarts. Fleming's medicinal whiskeys are sold at wholesale by the following firms, to whom orders may be sent: Geo. C. Goodwin & Co., Boston, Mass.; Strong, Cobb & Co., Cleveland, Ohio; H. B. Claffin & Co., Providence, R. I.; Kauffman & Lattimer Drug Co., Columbus, Ohio; supplies can also be ordered direct from Jos. Fleming & Son, 413 Market street, Pittsburg, Pa.

American Silver Trusses in Canada.

The American Silver Truss Company of Buffalo have sold the Canadian patent right on their fine line of trusses, the Smith Manufacturing Company of Galt, Ont., purchasing the right for the province of Ontario, and Cushing and Co., of Montreal, controlling the right for the provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward's Island. These firms have already placed the new trusses on sale and have met with the same happy results as have followed their introduction to the markets of the United States.

Don't miss the League Mass Meeting in Mott Memorial Hall October 3.

A New Plaster Price List.

In a unique binding of paper tinted to resemble a Seabury mustard plaster, Seabury & Johnson, Seabury Building, New York, have issued their 1894-5 catalogue and price list.

The announcement of a large cut in the prices of plasters, etc., which has been brought to the attention of every druggist in the United States and Canada by means of circulars and advertisements in the pharmaceutical press has served to direct an unusual amount of attention to the products of the Seabury laboratories. The new price list is revised in accordance with the new scale of prices and contains fuller reference to measurements and weights than any previous editions. A Telegraphic Code by which buyers may more economically communicate with the firm by wire is also an addition to the catalogue.

The telegraphic code consists of an ingenious arrangement of two and three syllable words which will facilitate the forwarding of orders in emergencies.

An example of the use of the telegraphic code is given in the following message:

BOSTON, Mass. Sept. 15, 1894.
Seabury & Johnson, N. Y. City.
Vacant, Wander, Habit. GEO. GOODWIN & CO.

The above message is translated thus, by reference to the code:

"Send by freight, one dozen iodoform gauze 10 per cent., in patent aseptic containers, yards."

The new catalogue is intended to replace all others of previous date and a recommendation to destroy all previous catalogues is printed on the front page of cover.

The value of a catalogue of this character which simplifies reference to the great assortment of gauzes and manufactured goods put up by Seabury & Johnson is too apparent to be dwelt upon and our readers should require no special pleading to induce them to write to Seabury & Johnson for a copy.

THE TAX-FREE ALCOHOL QUESTION.

A Pittsburg Druggist on the Alcohol Question

A manufacturing chemist of Pittsburg expresses his views on the tax-free alcohol question as follows in the *Pittsburg Post*: "As we understand it the proposition of the wholesale druggists to Secretary Carlisle is to have goods made up in quantities of a barrel at a time of any one kind of medicine. In consideration of their making a barrel of one mixture at a time there will be no tax on the barrel of alcohol so used. If such is the case, it will be the means of placing the manufacture of drugs wholly in the hands of those having immense capital, barring out small manufacturers who might desire to make only from one to five gallons of any preparation. Many preparations are very costly, and used only in small quantities; a barrel of some drugs would supply all the physicians in the United States for a year.

"The regular retail druggist, if the plan suggested is adopted, would be practically barred from manufacturing

his own preparations. Such a decision on the part of Secretary Carlisle would be the practical inception of the greatest monopoly of the nineteenth century. A small manufacturer should have the same concessions from his government that a large one has. Such a ruling would bar to a great extent the manufacture of new articles, putting it in the power of the capitalist to place the article on the market. The drugs could not be manufactured in barrel lots without a combination of wholesale druggists and the division of the product of manufacture among themselves, as in many drugs used by physicians it would take a good many wholesale druggists to sell a barrel in a year.

"There are hundreds of manufacturers, both small and large, who would be glad to get their alcohol untaxed in lots of five gallons or more, and they should have the right to make a pint each of 40 different tinctures or preparations, or five gallons of any one kind, as their trade demands, so that they use the five gallons or more at one time.

"It has been stated that several large manufacturing chemists have said to Secretary Carlisle that it would be inadvisable to take off the tax on alcohol for the reason that a good many cheap and worthless preparations would be thrown on the market. The key to the situation seems to be that several of the largest manufacturing chemists carry an immense stock of extracts, etc., manufactured from alcohol, on which the tax has been paid. They would therefore have to reduce the price from 50 to 75 per cent. in order to compete with those who would get the alcohol without the tax.

"The delaying of the decision as to regulations by Secretary Carlisle is only prolonging the time for these men to dispose of their high-cost product before manufacturing under the new schedule, as also giving wholesale druggists the chance to unload their stock of alcohol at an extra profit of 84 cents a gallon, the wholesale druggists having raised the price of alcohol from \$2.40 to \$2.74 a gallon as soon as the new schedule went into effect. These wholesale druggists purchased this alcohol before the additional tax was added. Many small dealers are now losing heavily on all the alcohol they use. A prompt decision from the secretary is earnestly desired. With untaxed alcohol the American manufacturer can go into the Canadian market, placing his products there with profit and success."

Wholesale Druggists and Free Alcohol.

A delegation representing the National Wholesale Druggists' Association consulted with Secretary Carlisle on the 12th inst., regarding the enforcement of the provision in the new tariff law respecting the use of alcohol in the arts and manufactures. Geo. A. Kelly, of Pittsburg, who acted as spokesman, submitted the following:

"In conformity with the understanding that was had at the interview with you on the 4th inst., and in behalf of the Na-

tional Wholesale Druggists' Association, the following views are respectfully submitted in regard to the regulations to be prescribed by the Secretary of the Treasury for the execution of section 61 of an act entitled, 'An act to reduce taxation, to provide revenue for the Government and for other purposes,' viz.:

"The law appears to have defined the meaning of the word 'manufacturer.' He must be a user of alcohol in the arts or in any medicinal or other like compound, and in use of such alcohol he must have so procured it in defined quantities as to be able to exhibit and deliver 'up the stamps which show that the tax has been paid thereon.' It thus appears that while the word 'manufacturer' is defined, there are limitations to the application of the word so defined, and to the persons who use alcohol for the purposes prescribed, and who procured it in such form that the stamps can be produced as evidence of the right of the claimant to a 'rebate or repayment of the tax' which he may have paid thereon. It is understood by us that total contents of every package for which a claim for rebate can be sustained must have been used in the manner and for the purpose prescribed in the statute.

"While it appears to be essential to the due execution of the law that any applicant for a rebate or repayment of the tax should be able to show that such alcohol has been used in the 'arts' or in a medicinal or other like compound, it does not seem to be necessary in the preparation of the regulations to attempt by enumeration or by rules to define the practical meaning under the statute of the word 'arts,' or in the phrase of 'in any medicinal or other like compound,' inasmuch as in the disposition of such an application for rebate the department can reach a more satisfactory result by dealing with the particular branch of business covered by the word 'arts,' and may also decide satisfactorily whether a particular preparation is medicinal or a compound which in its nature is like to a medicinal compound.

"It appears to be the requirement of the statute that a party using alcohol for the purposes mentioned must satisfy the collector of internal revenue of the State wherein he resides or carries on business that he has complied with the regulations in order that the party may be entitled to receive the rebate or repayment of the tax which may have been paid, and it is assumed that the regulations will specify the nature of the evidence to be furnished to the collector.

"It is also assumed that parties who may apply for the benefits or privileges of the statute will be required to furnish bonds for the fulfillment of all their duties and for an exact compliance with the law and with the regulations of the department.

"It is assumed further that the execution of any regulations which may be established will be attended with expenses, for the payment of which no appropriation has been made. Under this head it is suggested that a tax or fee might be laid upon manufacturers for the purpose of creating a fund in the hands of the Secretary of the Treasury, from which any additional expenses might be met.

"It may not be out of place for us to say that the parties we represent are greatly interested in the subject to which this communication relates. At the present moment we are unable to proceed to the manufacture of goods in quantity, not knowing but that we may be compelled to put our products upon the market in competition with articles made of free alcohol.

We are, therefore, anxious for an early announcement of the regulations."

After the reading of the brief, Secretary Carlisle pointed out the difficulty of enforcing any regulations which did not define the classes of manufacturers to whom they applied and the necessity for some preliminary notice or license of any person claiming the benefit of the law in order to procure proper supervision and the authority of the department to impose anything in the nature of a tax for supervision upon a manufacturer.

Manufacturers and Jobbers of Plate Glass Fail to Connect.

An important secret meeting of plate glass manufacturers and jobbers of plate glass was held at Crescent Springs, Penn., last week. Representative jobbers from all over the country were present at the invitation of the manufacturers. Every precaution was taken to keep the newspapers even from learning the mere fact of the gathering. The *Review* has learned from authoritative sources, however, that the object of the meeting was to form an association of jobbers to which the entire output of the plate glass manufacturers should be sold at an uniform scale of prices, the stock thus obtained to be distributed among the members of the association in accordance with the demands of their business. It is learned that the meeting dispersed without accomplishing its object owing to the refusal of one of the concerns represented to agree to the terms proposed. It is impossible to obtain the details of the proposition submitted, but the part stated above can be substantiated. The plan has not been totally abandoned and further efforts will probably be made to bring it to a consummation. The project has been under consideration for a year or two it is said, and originated in the dissatisfaction of the jobbers on account of the difference and discrimination in prices to jobbers by the manufacturers.—*Oil, Paint and Drug Review*.

GLASSWARE DUTIES.

In paragraph 28, which is the glass schedule, there is a transposition of the word "and" which will cause the customs officials a great deal of trouble if it is not corrected. The last clause of that paragraph was intended to read: "All other plain green and colored, molded or pressed, and flint and lime glassware, forty per cent. ad valorem. The "and" between "flint" and "lime," was transposed, however, to follow the word "lime," and the result is that all other glassware not specifically provided for in that paragraph is made dutiable at forty per cent.

Frederick Stearns & Co's Pharmaceutical Specialties.

Among the specialties introduced by the well-known house of Frederick Stearns & Co., manufacturing pharmacists, Detroit, which are most highly esteemed by physicians, are Stearns' Wine of Cod Liver Oil with Peptonate of Iron; Stearns' Cascara Aromatic, Hæmoferrum, and Stearns' Kola Cordial. The last mentioned is the most recent introduction. Kola, as is well known, contains the stimulating qualities of tea and coffee with the nourishing features of cocoa, besides possessing a principle peculiar to the Kola nut, whereby fatigue of both mind and body

are relieved without creating a habit such as follows the use of coca and its salts. Stearns' Kola Cordial is a preparation of undoubted excellence, which has already gained recognition at the hands of many prominent members of the medical profession. A full list of Frederick Stearns Co.'s different specialties can be had upon application to the firm at Detroit. See their advertisement in this issue.

Review of the Wholesale Market.

NEW YORK, Sept. 24, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

The past fortnight has developed no material increase in the volume of business in drugs, dyestuffs and chemicals. The market on the contrary has weakened in many particulars and many in the trade are showing a freer disposition to realize at slight concessions from what are regarded as fixed prices. Buyers for the most part continue to adhere to the principle of ordering goods in quantities sufficient to cover immediate necessities only and the market in consequence is lacking in tone. Although the prospects of a speedy improvement in the business situation are somewhat obscure, it is freely conceded that a revival of speculative interest is imminent and anticipations are confidently entertained of a return to higher prices. The changes which have occurred in the interval record a lower range of values. Opium has still further receded and continues weak and easy. Codeine has marked a further decline. Mexican sarsaparilla is lower. Acetanilid, damiana leaves, poppy seed, fennegreek seed, celery seed, manaca root, gray acetate of lime and cummin seed are all offering at lower values. Increased firmness and in some instances advances are to be noted in the following lines: American saffron, Oregon balsam fir, oil cassia, clove oil.

DRUGS.

ALCOHOL has not changed materially during the interval. The influence of outside competition tends to unsettle prices somewhat but the Trust managers continue to quote \$2.51@2.58, the inside price being for lots of ten barrels; while independent producers are asking \$2.38 net.

ARNICA FLOWERS, new crop, are in good demand and firm with 8½c now quoted as inside.

BALSAM FIR, Canada, in cans is held at \$3.25@3.30. The article is exceedingly scarce and offers of barrel lots are rare.

BALSAM FIR, Oregon, is meeting with a freer inquiry and we are reported numerous small sales at the range of 70@80c.

BARK, Cascara sagrada, is in good request and firm at quotations. A sale of 1000 lbs. at 4½c is reported.

CACAO BUTTER remains quiet but the price of foreign bulk is sustained at 32@32½c.

CASSIA BUDS continue in moderate demand and among recent transactions we are reported sales of 25 cases at 18½@19c. The latter price is now quoted steady for goods of prime quality.

CASTOR OIL is passing out with increased freedom and the demand is such as to tax the efforts of manufacturers to

make deliveries. Values are nominally unchanged.

CAFFEINE is exceeding scarce and coupled with an increased demand is serving to harden prices, though no quotable change is to be noted.

CHAMOMILE FLOWERS, new German, have sold at 15c during the week. The quoted range remains 12½@20c as to quality and quantity.

COCA LEAVES are scarce and firmer. Best grades Huanaco held at 30c and Truxillo 20c.

COD LIVER OIL, Norwegian, is passing out into channels of consumption with considerable freedom and values are firmer, though \$27@29 is still quoted for ordinary and best brands respectively.

CODEINE marks a further reduction, manufacturers now quoting the alkaloid at \$3.70@3.85 in bulk as to quantity and \$3.95@4.10 in eighths.

COLOCYNTH APPLES, Trieste, are well sustained at 36@38c, with the stock reduced to rather limited proportions. The article appears to be scarce in Europe and higher values are looked for.

CUTTLE BONE, Trieste, does not vary to any extent; sales reported of 20 straps at 8½c.

DAMIANA LEAVES are less firm, and holders are offering supplies down to the point of 10c.

DRAGON'S BLOOD in reeds is about out of market. Mass may be obtained at 20c and tears 25c.

ERGOT, new crop, has sold freely for forward delivery. Among other transactions we are reported sales of 8000 lbs. at 18c for German and 21c for Spanish.

JABORANDI LEAVES continue to meet with a fair moderate inquiry and numerous small sales are reported at the quoted range of 18@20c.

JUNIPER BERRIES, new crop, are in good demand and large sales have taken place, but the prices obtained have not been made public. The range of the market is 2½@2½c as to quality and quantity.

LYCOPodium is in better demand of late with the current sales at 49@53c as to brand.

OPIUM continues to reflect an easy and unsettled market. For original packages there is no demand of consequence and few sales are reported, though cases are offered without reserve down to the point of \$1.82½ @ 1.87½ the latter price representing single packages. Buyers are pursuing a policy of extreme caution and speculation as a feature of the market is entirely absent. It is probable that values may recede still further and many are delaying action until the market reaches a lower level, though it is difficult to discover the influences that tend to a belief in this contingency. The jobbing quotation remains at \$1.92½ and for powdered, \$2.55 @ 2.60 is asked.

QUININE continues in firm position and a fair steady inquiry is reported. Speculation is, however, withheld for the moment and the chief inquiry is of a jobbing character, with no interest taken in round lots. Foreign brands do not offer below 24½@24½c regular terms. It is however stated in some quarters that these figures can be shaded on firm bids for quantity lots of the less popular makes. The market is in excellent position and it is extremely probable that higher prices will soon prevail.

SAFFRON, American, has advanced in the interval and 30c is now quoted inside for jobbing quantities.

SIMARUBA BARK is scarce and held at 35c as an inside price.

TONKA and VANILLA BEANS are in steady moderate inquiry and firm at previous prices.

DYESTUFFS.

CUTCH has sold freely in boxes during the interval, sales aggregating some 900 packages being reported at quotations. Bale and slab are actively inquired for at the quoted range of 55½@6c for the former, and 6½@8½c according to brand, for the latter.

DIVI DIVI is meeting with a moderate sale at \$60@70.

GAMBIER is maintained firmly at the previous range of 4½@4½c.

NUTGALLS, Blue Aleppo, are meeting with a moderate sale at the range of 13@13½ c.

SUMAC, Sicily, is in normal supply and offering at \$60@65 as to quantity and brand. Forward shipments quoted \$55@60.

TURMERIC is quiet at unchanged prices.

CHEMICALS.

ARSENIC is cabled higher abroad, and values are ruling firmer here in consequence. We quote the range at 3½@3½c.

ACETATE OF LIME, gray, is neglected momentarily and prices are weak at 1½@2c.

BLEACHING POWDER remains quiet, but the market is sustained at the previous range of \$1.62½@1.85 for German and English as to quantity.

BRIMSTONE, crude, upon spot is held at \$16.50 for best seconds. Parcels to arrive and for forward shipment held at \$16.

CHLORATE OF POTASH is dull and easy. Crystals and powdered quoted nominally 11½@11½c, with down to 10½ quoted as acceptable for round lots.

CREAM TARTAR is higher, the present price from manufacturers' hands being 17½@18c for crystals and powdered respectively.

CITRIC ACID continues to offer at 37½@38c, but the demand is confined to small and unimportant transactions.

NITRATE OF SODA is passing out freely into channels of consumption and values are well sustained at the previous range of say \$2.15@2.20 for store goods.

QUICKSILVER has advanced 1c and is now quoted 50½@51c.

TARTARIC ACID is in good request at the range of 21½@22½c, for crystals and powdered respectively, though several makers are unwilling to accept orders below 23c.

SODA BICARBONATE, English, is nominally quoted 2½@3c, though the inside price can be shaded on quantities.

SODA CAUSTIC is actively inquired for with numerous sales at \$240@2.65 for 60 per cent. and \$2.17½@2.32½ for 70@74 per cent., as to quantity.

ESSENTIAL OILS.

ANISE has advanced to the point of \$2.00 at which figure a moderate business is reported.

CASSIA has advanced in the London market and holders here have raised their selling limits to \$1.00.

CLOVE continues quoted 55@60c though the inside price is exceptional.

ERIGERON is reported sold to some extent at 90c@1.00.

PEPPERMINT is still somewhat unsettled. Western bulk has sold with less reserve and prices are a shade firmer, but there is practically no change to report in the situation. Purchases can be made in the West at the equivalent of \$1.60 laid down and from Wayne Co., \$1.75 f. o. b. is asked. The spot price is \$1.70@1.90 as to quality. H G H remains quiet but firm at \$2.25.

GUMS.

ASAFETIDA continues in moderate jobbing inquiry with current sales at 22@24c for best grades.

CAMPHOR continues in demand and firmer. Japanese ounce blocks to arrive are held at 44c. Two-pound cakes upon spot quoted 42c and domestic 42@43c for barrels and cases.

CHICLE is quiet but steady at the previous range of 27½@28c.

GAMBOGE is in better supply and holders are now quoting 48@50c for mass and pipe respectively.

GUAIAAC is selling in small quantities at the range of 12@20c as to quality.

SHELLAC is finding a good consumptive inquiry and values are ruling firm at the range of say 38c for D. C., 33@34c for VSO, Diamond I 30@34c S S 30 and T N 25@27c.

TRAGACANTH is tending higher in sympathy with the London market. Aleppo is now held at 27@28c as to quality and Turkey 40@70c.

ROOTS.

We have no important changes to report in this department. Prices are nominally steady at quotations.

JALAP is in fair demand and firmer. Sales reported at 24c with the range 24@26c.

MANACA ROOT is offering in instances at 55c, this being a considerable reduction from former values, which during the recent scarcity reached the point of \$1.00.

SARSAPARILLA, Mexican, is in abundant supply, and values are easy, with jobbers quoting 7½@7½c.

SENEGA, Minnesota, is selling moderately within the quoted range.

SEEDS.

CANARY is reported selling in small lots upon the basis of 3½@3½c for Smyrna and 3½@3½c for Sicily.

CELERY will probably advance in sympathy with primary markets but quotations for spot mark a slight lowering in value, 10½c being quoted regular.

CUMMIN, Malta, is not inquired for to any extent, and values are quoted nominal at 8@8½c.

CORIANDEER is unchanged at 9@9½c, though at this figure supplies are offered sparingly.

FENNEL, German, is firm at the recent improvement, holders quoting best grades at 9½@10c.

HEMP, Russian continues very firm with 2½c a strictly inside price.

MUSTARD, California, continues dull and easy at 3½c for yellow in quantity and 3½c for brown.

POPPY has declined abroad and the price in this market for spot good is affected with 4½@5c now representing the quoted range.

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PROSPERITY of the solid, substantial kind is again with us. There has not been any feverish speculative tendency such as occasionally follows a period of depression and which is in turn always followed by a corresponding period of reaction, but the growth of business has been steady and along conservative lines that give the best assurance of permanency to the improved commercial conditions. The fact stated by CHAUNCEY M. DEFEW at the N. W. D. A. Banquet that the west-bound traffic is superior to the east-bound is proof positive of a returning era of prosperity, a prosperity which each can aid in fostering by the adoption of progressive and liberal methods in his own private business.

THE MEETING REVIEWED.

THE WEEK'S CONVENTIONS. NEW YORK has been a city of conventions for the past week and much important business of direct interest to the wholesale and retail druggists of the country has been transacted. In presenting a review of the work accomplished by the several associations our account must necessarily be brief and the reader who is desirous of following the proceedings in detail is referred to the full report given elsewhere in this issue.

THE PROBABLY the most important subject that came up N. W. D. A. for discussion at the meeting of the National Wholesale Druggists' Association was the report of the Committee on Proprietary Articles as presented by MAHLON N. KLINE, the chairman of the committee. The address of the retiring president, of course, took precedence over this, but the recommendations and suggestions contained in the address were not of such a character as to provoke animated debate. His recommendations looking to closer restrictions in the rules regulating the admission of members, associate and active, as well as those concerning the levying of assessments upon the members received the approval of the Board of Control and were adopted by the association.

THE WORK OF THE PROPRIETARY COMMITTEE.

In the report of the Committee on Proprietary Articles special prominence is given to the work accomplished by Mr. BOWER in the proceedings brought against the association by the firm of JOHN D. PARK & SONS of Cincinnati. This work is probably alluded to as the most important of the year so far as the contract system is concerned.

REBATE DISCOUNTS. THE question of bringing about an increase in the rebate discount was referred to at length in the report. The complaint is that the present discount of 10 per cent. barely covers the cost of handling the goods, and it was recommended to increase the rebate discount from 10 per cent. to 10 and 5 per cent., but the

Board of Control were not prepared to endorse a recommendation of this character and no action was taken.

THE REBATE SYSTEM AFFIRMED. IT IS curious to note the interest which centers around this old but ever fresh topic. To many observers the interest excited is akin to that which comes from watching the dying struggles of some animate thing which has been dear to them. It is certainly becoming more and more recognized that the existence of the jobber is largely dependent upon the maintenance of the contract system; and the Board of Control voiced their appreciation of this in the following resolution:

Resolved, That we hereby reaffirm our determination to uphold the contract plan, pledge our fullest and most loyal support to its provisions, and insist upon its being maintained in its integrity by each and every member of the organization.

THE DETROIT PLAN AMENDED. AS AN essential feature of the contract system, or rather as a condition necessary to its proper maintenance, the Detroit plan received the endorsement of the Board, who strongly urged the adoption of its principles upon all proprietors. The discussion over the subject of designating certain channels of distribution for all proprietary goods in connection with the foregoing resolution was participated in by both wholesalers and retailers and much of the ground covered at last year's meeting in Detroit was traversed, with the result of gaining for the retailers an important concession, this consisted of the insertion in the third resolution of the Board of Control of the word "drug" after jobbing and before business. This should prevent the sale of proprietary articles to wholesale grocers and dry goods stores, and the results of its enforcement during the coming year will undoubtedly justify the efforts of the retailers to secure its adoption.

CHICAGO RECOGNIZES NO LAW.

QUITE a ripple of excitement was caused during the discussion of the resolutions of the Board of Control respecting the rebate system and quarter-of-a-dozen clause, by the admission

of a Chicago member, who, in the most unconcerned manner possible, told of the failure of his firm to carry out the contract plan, offering as excuse the statement that the firm which he represented controlled most of the jobbing business in Chicago, and were entitled on this account to make rules of their own regarding the sale of goods. The absurdity of this explanation was instantly recognized by many of the members present, J. C. ELIEL, that sturdy representative of Minnesota, making a pointed protest against the "scandalous" conduct of the Chicago firm.

* * *

ADULTERATED DRUGS. A REPORT of unusual value was presented this year by the Committee on Adulterations, of which ALBERT PLAUT is chairman. The literary qualities of this report are superior to many previous reports, and the retail pharmacist will find in it much that is interesting. We will print the report in full in our next issue, and commend its perusal to every one interested.

* * *

FEWER WHOLESALE DRUGGISTS. THE statistics contained in the report of the Committee on Credits and Collections, reveal a somewhat unusual order of things in the development of the wholesale drug business. It seems that when for any reason a wholesale drug house drops out of business there is none to take its place, and it is a fact that there are less wholesale druggists in New York to-day than there were thirty years ago. The fact is commented upon that while the wholesale drug business has year by year increased in volume, no corresponding increase in profits has been noted. In explanation of this the committee presents a comparison of the relative profits of business accruing to wholesale druggists and to wholesale grocers, which seems to show greater profits and less expenses for the grocer, as against fewer profits and higher expenses for the wholesale druggist. This statement will be read with particular interest just now, in view of the recent utterances of President G. WALDO SMITH, of the Wholesale Grocers' Association, in which he has expressed the fear that the wholesale dealers, through a lack of profits, will be obliged to abandon their business. As a remedy, Mr. Smith suggests that the manufacturers of package articles adopt the rebate system.

* * *

FOR FREE ALCOHOL. THE important question of free alcohol was brought up by several committees and a resolution was passed by the Board of Control deprecating the delay on the part of the Treasury Department in issuing regulations to make available the recently enacted law and urging such regulations to be promulgated without further delay. The

sentiment of the members composing the Committee on Legislation seemed to be opposed to urging action on the part of the Secretary of the Treasury, but the subject was disposed of in the manner stated.

* * *

ENTERTAINMENTS. It does not detract from the glory of previous meetings to say that the entertainments arranged for the meeting in New York have surpassed all that went before. It could not be otherwise with the excellent committee to whom were entrusted the conduct of affairs; but the assurances of admiration and gratitude so freely expressed by attending members tell their own tale. We have pleasure in reporting the resolution to this effect presented on behalf of the association by Mr. Kline:

Resolved, That we, the National Wholesale Druggists' Association, acknowledge in its fulness our great sense of indebtedness to the citizens of New York, to our members in New York and to the committee who have so unceasingly and successfully contributed to the happiness of our stay in the "best city in the best country in the world."

* * *

THE NEW PRESIDENT. THE selection for President of the Association of THOMAS F. MAIN of this city will be received with satisfaction by every member who has the interests of the Association at heart. MR. MAIN has long had the respect of his associates in business in this city and is in every meaning of the phrase "a prophet in his own country."

THE INTERSTATE LEAGUE.

AT the League mass meeting on October third, a full account of which appears on page 274, most encouraging reports were presented of the progress of the League.

Over 70 per cent. of the fraternity in these cities have subscribed to the plan of the League, and all that is now necessary to secure the enforcement of the plan is to keep the enthusiasm alive and secure the remaining 10 per cent. of signatures.

The canvassers from New England met with the success which always follows determined effort backed up by sincerity of purpose, and the druggists of New York and of Brooklyn should show their appreciation of the efforts made on their behalf by giving support and encouragement to the local branches of the League.

We have given the League our consistent support, because we believe their cause is the cause of the retail druggist of every section of this broad country, and the journals which have heretofore refused to give the League the support which it certainly deserves as the only commercial organization of retail druggists in America, may well be asked the question: In whose interests are you published?

VALUE IN ADVERTISING.

ONE important thing which manufacturers and others should remember is that they should advertise to get customers. Millers frequently advertise in journals which go to millers; insurance companies in papers which circulate chiefly among insurance men, and manufacturers in periodicals which circulate principally among manufacturers, etc.

Neither of these accomplishes the object in view, because they reach, principally, readers in their own line of business—competitors, not customers. An advertiser should place his announcement where it will reach the men who purchase his wares; and in this respect the "American Druggist" is an unequalled medium, for its readers are the principal distributors, not only for all kinds of medicinals, but of other products, and are shippers, insurers, travelers and consumers as well.

Our paid subscription list reaches the best manufacturers and wholesale and retail druggists in every State and Territory of the United States and many in foreign countries.

THE activity of the Medical Society of the County of New York in bringing prosecutions against persons illegitimately practicing medicine has been so marked as to verge upon being intemperate. One of the evil fruits of this activity came to light recently in the case of a child who had been poisoned by carbolic acid and whose parents naturally sought the aid of the nearest druggist. This apothecary, it happened, had been so terrorized by the minions of the County Medical Society that he refused to prescribe, fearing, probably, either that this was merely a decoy case or even that if not a decoy case any prescribing done by him would inculcate him in the eyes of this fierce champion of the letter of the law. While the law should be enforced it should be enforced with discretion, for its literal enforcement will frequently work evil.

WHO shall say now that Brooklyn is not an exciting place to live in or that druggists are mere drudges without sentiment or romance, for has not a Brooklyn druggist been fined one hundred dollars for kissing a customer against her will—and paid it right cheerfully as one not inclined to rail at the bargain made!

TO the already wide range of accomplishments required of the drug clerk is to be added that of being a sprinter, for a Philadelphia clerk has found occasion to exercise his ability in this direction in capturing a would-be suicide to whom he had sold five cents' worth of laudanum. It might be wise to require clerks to carry with them hypodermics loaded with apomorphine, as this would facilitate the induction of emesis in recalcitrant cases.

Written for the
American Druggist and Pharmaceutical Record.
**PALATABLE CASCARA COM-
POUNDS.**

By FRANK EDEL.
Des Moines, Ia.

There can be no question but that it is the duty of pharmacy to present medicines in as palatable a form as is consistent with the retention of their medicinal properties. Thus far the claims of elegant pharmacy cannot be controverted, but when the idea is carried so far that medicinal effect is considered secondary to elegance as a pharmaceutical the whole thing becomes a farce. There is no doubt that the nauseous taste of some medicines may often be considerably mitigated or entirely done away with without impairing in any way the activity of the medicine. When such is the case, it is the duty of both pharmacist and physician to see that it is done. It is hard enough to be sick without having to take nauseating medicines unnecessarily.

A POPULAR MEDICINE.

Among medicines of modern introduction none are more popular than cascara sagrada. It is very disagreeable to the taste and on this account cordials and elixirs in which the bitterness is largely covered by aromatics have had a large sale; but the dose of these is necessarily large. The bitterness is difficult to mask and on this account rhamnus frangula is often used in its place.

BITTERLESS CASCARA.

Some years ago investigation showed that the bitter taste of cascara sagrada could be removed in a great measure by mixing the drug with calcined magnesia and macerating the mixture with water. This mitigated the bitter taste somewhat and several manufacturing houses placed on the market a bitterless or non-bitter fluid extract. The question was at once raised whether such treatment impaired the virtue of the drug. The burden of testimony seemed to prove that where the extract was carefully made that the laxative properties were unimpaired. Within the last year an enterprising manufacturer has placed on the market an

AROMATIC EXTRACT OF CASCARA

claiming that each pint contained the virtues of one pound of cascara bark. This preparation has had a large sale, and several manufacturing houses are putting up similar preparations. With a view to proving to my own satisfaction that the claims of the manufacturer as to the cascara strength of his extract were well founded, the following line of experiments were begun. In passing, however, it may be well to state that the writer has no desire to take from the enterprising firm who placed the preparation on the market any of the honor or profits due to their enterprise and ingenuity.

SUBSTANCES USED.

Investigations made by several parties several years ago showed that when treated with calcined magnesia, as above mentioned, cascara is deprived of its bitter principle. While this was so it also increased the amount of extractive matter quite largely and altered the color of the extract from a dull to a deep red. Advantage of this fact is taken in preparing an aromatic extract. Liquorice is used to give the preparation a distinctive taste and a small amount of oil of fennel is added to flavor.

BITTERLESS EXTRACT OF CASCARA.

The formula which in my experience

furnishes the best bitterless extract is as follows:

Cascara sagrada in coarse powder.....	16	ounces
Calcined magnesia.....	1 1/4	ounces
Water.....	18	ounces
Alcohol.....	12	ounces
Dilute alcohol, a sufficiency.		
Glycerin.....	8	ounces

Make an intimate mixture of the cascara and magnesia, moisten with water and macerate for several hours; then pack the mixture in a percolator and allow to macerate 48 hours, then add twelve ounces of alcohol and allow to macerate 12 hours longer. Start percolation using dilute alcohol; reserve the first twelve ounces and then continue percolation to exhaustion. Recover the alcohol and evaporate to a soft extract and dissolve in the reserved portion, then add glycerin to make sixteen ounces. This makes an excellent extract of its kind and the writer gives it here as a basis for experiments made to produce a palatable aromatic extract.

LIQUID EXTRACT OF LIQUORICE.

In the formulas which follow, liquid extract of liquorice is largely used and a word concerning its mode of preparation will be timely.

Some years ago, in a paper read before the Missouri Pharmaceutical Association, G. H. Charles Klie recommended a liquid extract of liquorice made from the stick extract by extraction with cold water. This preparation, which the writer has used for the past five years, is an elegant one. It is easily prepared, and is cheaper than the fluid extract. Containing no useless extractive, it mixes clear with elixir, syrup or water. The formula I have used for this preparation is as follows:

Take of stick extract of liquorice 16 ounces; break into small pieces and pack in a percolator, with alternate layers of rye straw; first a layer of straw, and then one of liquorice, until the percolator is filled. Cork the percolator, fill with cool water and macerate for twenty-four hours; then remove the cork and allow the liquid to run off. Reserve this and keep it in a cool place. Place enough water in the percolator to cover the extract again, and allow to again stand for twelve hours, permitting the liquid to then run off as before. Mix the two liquids and evaporate on a water-bath until twelve fluid ounces remain. Then add two ounces of glycerin and two ounces of alcohol.

This process yields a preparation that contains all the virtues of the liquorice. It is cheaply and easily made, and where used once will be used again. Of course, it can be made stronger by further evaporation, but that is hardly necessary.

EXPERIMENTS.

Below are noted the results of some experiments undertaken with a view to determine the relative merits of different formulas.

NO. I.

A pound of extract of cascara was made by the formula for bitterless extract of cascara quoted in the opening paragraphs, modified as follows:

The first eight ounces of percolate were reserved and percolation proceeded with to exhaustion. After recovering the alcohol, the percolate was reduced to a soft extract by evaporation over a water-bath, four ounces of glycerin added, and the whole dissolved in the reserve. The process was then completed by the addition of four ounces of liquorice extract (made according to the formula given above), or sufficient to bring up the bulk to sixteen ounces, and six drops of oil of fennel.

NO. II.

The preceding process was repeated, reserving in this experiment only six ounces of percolate, and proceeding as above, using six ounces of glycerin and liquorice extract to make sixteen ounces, with oil of fennel sufficient to flavor.

NO. III.

Process No. 1 was modified to reserve eight ounces of percolate and adding two ounces of syrup and two ounces of glycerin.

NO. IV.

Process No. 1 was modified to reserve six ounces of percolate and the addition of four ounces of syrup and two ounces of glycerin.

NO. V.

The last process was modified to allow percolation to proceed to exhaustion, and after the recovery of alcohol four ounces of glycerin were added and the whole reduced by evaporation to twelve ounces. Four ounces of liquorice extract and six drops of fennel oil were then added to complete the extract.

In these experiments the end sought for was the extinguishing of the intensely bitter taste of the cascara. Sweetness was aimed at and experiment No. 1 proving unsatisfactory, the additional experiments were carried on. In none of these, however, did the writer succeed in producing a preparation free from a bitter twang. The liquorice in some instances only seemed to intensify the bitterness.

From this I concluded that neither glycerin nor syrup could be depended upon as sweetening agents for cascara.

SACCHARINE AS A SWEETENER.

Saccharine was tried in the proportion of 30 grains to a pint, and added to the product of each of the five experiments. The result was convincing of its value; a satisfactory sweetness was produced and the cascara was completely masked. The best results were obtained from the addition of saccharine to the product of experiment No. 5. It furnished an extract of fine keeping qualities and of elegant appearance. Tested for its medicinal activity, it was found equal to any of the preparations of the manufacturing pharmacists. With this extract, syrups, elixirs and cordials can be easily made.

The fact that saccharine played so important a part in sweetening the aromatic extract led the writer to employ it in some combination elixirs noted below:

LAXATIVE ELIXIRS.

I.

Fluid extract cascara (bitterless).....	3	ounces
Fluid extract senna.....	1	ounce
Fluid extract wahoo.....	1	ounce
Liquid liquorice.....	2	ounces
Saccharine.....	60	grains
Aromatic elixir, enough to make.....	16	ounces

The bitter taste of the wahoo is well concealed by this formula, and the elixir is miscible with water.

II.

Fluid extract cascara (bitterless).....	3	ounces
Fluid extract rhei.....	1 1/4	ounces
Fluid extract senna.....	1 1/4	ounces
Liquid liquorice.....	2	ounces
Saccharine.....	60	grains
Aromatic elixir enough to make.....	16	ounces

About a year ago the writer proposed a formula based on the formula given for bitterless fluid extract cascara for cascara cordial. It was published in the "American Druggist," and has been frequently reprinted, so that it will not be necessary to repeat it here.

The writer is convinced that in saccharine we have a sweetening agent peculiarly well adapted for masking the disagreeable taste of many drugs.



Eitnerin, is the name given by Gehe to an article which they propose to use as a substitute for egg albumen in manufacturing leather.

Tussol is, according to the *Suddeutsche Apotheker Zeitung*, which was mentioned in our last issue consists of antipyrine cyanide. It is protected by patent rights.

Chloral Caffeine is made by bringing chloral and caffeine together either in alcoholic or aqueous solution according to a patented process. It has the advantage of being easily soluble in water.—*Pharm. Centralhalle*.

Mercury Not Exhaled from the Lungs.—Gaglis states as a result of a series of observations recorded in the *Therapeutische Monats heft* that the exhalations from the lungs of patients who have been treated by the inunction of mercurial ointment do not contain mercury.

Detection of Foreign Fats in Petrolatum.—La Reole and Dupin state (*L'Union Pharm.*) that if 5 grammes of petrolatum be rubbed with 5 drops of potassium permanganate solution, there will be no discoloration if the petrolatum is pure. If any foreign fats have been added a chestnut brown color will be developed at once.

An Ammonia Bacillus.—Vander Mack states that the development of ammonia in distilled water is due to a bacillus which he terms the "bacillus ammoniacogenes." Fortunately this bacillus is very sensitive to the influence of daylight, and distilled water can thus easily be protected by exposure to sunlight.

Sulphur in Castor Oil.—A specimen of castor oil having been observed to blacken the silver spoon from which it was administered, an examination showed the presence of a considerable proportion of sulphur. The oil had been extracted by means of carbon bisulphide instead of by pressure as it should have been.—*Apotheker Zeitung*.

New Method of Preparing Salicylic Acid.—A process has been patented in which instead of adding an excess of potassa to the carbolic acid one molecule of the former is added to two of the latter in the presence of (infusorial earth). The mixture is then acted on direct by carbon dioxide at a temperature of 120 to 160° the pure acid resulting as the infusorial earth retains the impurities.—*Chem. Zeit.*, 1894, No. 71.

Erysimum Crepidifolium is a cruciferous plant known in Germany as *gäuserterbe* or *sterbekraut* (goose-death or death-weed). It kills geese when eaten by them, though they eat it readily wherever they find it. Prof. W. Zopf (who has examined the plant) attributes its poisonous qualities to a volatile alkaloid.—*Zeitsch f. Naturu.*

Cadmium salicylate may be obtained by the action of a hot solution of salicylic acid or cadmium carbonate or on freshly precipitated cadmium hydroxide, or by mutual decomposition between barium salicylate and cadmium sulphate. The pure salt forms white shining crystals melting at 800°C. soluble in 80 to 90 parts of water and in either cold or warm glycerin. According to Cesaris cadmium salicylate is useful in certain affections of the eye.

Beech and Oakwood Creosote.—Béhal and Choay (*Deutsche Med. Zeitung*) have examined quantitatively the creosote obtained from beech wood and that from oak wood and found them to be completely identical. Creosote contains sulphur derivatives, probably thio phenols, and also a body which under the influence of ammonia and air produces a substance which turns dark blue from alkalies and becomes almost red when treated with acids.

Djambo, a Javanese Cholera Remedy.—The leaves and bark of djambo tree are infused with rice and nutmeg by the Javanese and the infusion is administered in the diarrhoea of cholera. Several trees are known by the name of djambo in Java, but according to Sobreder, the tree referred to in this connection is the Myrtaceae *Psidium Guajava* Reiddi, which is indigenous to tropical America and is cultivated in Java. It is a styptic and stomachic.

Unguentum vegetabile is a preparation which has recently made its appearance in Germany. It is a soft, uniform, odorless salve, somewhat lighter in color than lanolin. It is made of a mixture of wax, oil and water and partakes somewhat of the nature of an emulsion, though from a practical point of view it differs from emulsions generally. The base is recommended by Parchem as being eminently satisfactory though cheaper than petrolatum. Parchem has not had time to determine as to its stability.

Fat in the Sweat Glands.—In a paper on the function of the sweat-glands in man, Dr. P. G. Unna gives a summary of the researches on this subject, and devotes special attention to the secretion of fat. He is of opinion that it is irrefutable that the ordinary sweat-glands in man secrete fat, and shows that this can readily be proved by treating sections of skin or the sweat of the hand with osmic acid. The fat, though similar to that of the subcutaneous glands, is described as differing from it in the same way that stearic and margaric acids differ from oleic acid (*Brit. Journ. Dermatology*, vi, 257).

The Behavior of Chloral Toward Alcohol and Water.—Prof. Ed. Schär has observed (*Jour. de Pharm., Ells. Loth.*) that when

an alcoholic solution of chloral alcoholate is poured into water oily drops immediately separate out which are for a certain length of time insoluble in water but which after stirring for a long time will dissolve, or if allowed to stand they will form an oily layer on the bottom which after a time without undergoing any apparent change will become as soluble in water as ordinary fused chloral hydrate. This action he explains by the theory that the alcoholate is insoluble in water but that on standing for some time in contact with water it gives up its molecule of alcohol in exchange for a molecule of water and then shows the normal solubility of chloral hydrate.

Extract of Guarana.—M. A. Miner has found by experiment (*The Apothecary*; 1894, iv., p. 16) that the best menstruum in preparing solid Extract of Guarana, is a mixture of two volumes of alcohol and one volume of water. This dissolved from guarana 27.86 per cent. of extract, from which he obtained 15.25 per cent. of caffeine. It is stated that a light-brown powder was easily obtained from this extract by trituration, which retained its pulverulent form on keeping, without any addition of milk sugar. This powdered extract then, being economically prepared, permanent and a little over four times the strength of the drug, is a satisfactory preparation. It could advantageously be reduced with sugar of milk so as to represent three times its weight of guarana; or, it might still better—be made to contain a fixed percentage of caffeine.

Cactus Grandiflorus.—Gordon Sharp and Hoseason have examined a number of specimens of this plant—the night blooming *Cereus* (Cactaceae)—but failed to find in them either glucoside or alkaloid. They have found, however, that the plant contains a series of resins, one or more of which are soluble in normal saline solutions, and such medicinal activity as it possesses is probably due to these. Pectin and gum are also present, together with a small amount of sugar. The resins are completely removed by absolute alcohol, almost wholly by absolute ether, less perfectly by chloroform or by rectified spirit. Pharmacological experiments, of which details are given, were performed with solutions of the pure resinous extract in normal saline solution (0.75 per cent.). The resins had little or no effect as compared with digitalis, and the result of the experiments appears to indicate that the plant is pharmacologically inert. At most it has some slight diuretic action (*Practitioner*, liii, 161).

Confection of Phosphorus.—Hartz recommends (*Pharm. Rundsch.* 1894; xii, p. 214) the following Confection of Phosphorus as a stable and satisfactory preparation: 7 ounces of the best wheat-flour, 1 ounce of armenian bole, and 8 ounces of glycerin are stirred together in a tin kettle of the capacity of 1½ gallon. A solution of 4 scruples of salicylic acid and 4 drams of sodium phosphate in 2 fluid ounces of water, is added, and then 14 fluid ounces of boiling water are added with constant stirring. The whole is now heated, until a thick, uniform paste is formed. 8 drams of phosphorus in sticks are then covered with the hot paste, and, by rapid but careful stirring, the phosphorus is distributed in about three minutes in a manner that no phosphorus granules will any longer be visible to the naked eye. 2 ounces of mutton-tallow are then introduced, the whole is covered, and when the tallow is melted, again cautiously stirred. The mass is apt to ignite during this last operation, unless this be done quickly and with care. Inexperienced persons will therefore do well to wrap a cloth around their hands.

Salantol is obtained according to Bourget by mixing salicylic acid and acetone. It has similar qualities to salol, passes through the stomach unchanged and is converted into salicylic acid, and acetone in the intestines. It is recommended in Summer diarrhoea.

Ice Crystals on Plants.—J. C. Bay deals with the formation of ice crystals on the surface of plants, under certain conditions of weather and surroundings, and states that the conditions of the phenomenon are that the temperature in the soil surrounding the roots of the plant must be above zero, as also must be that of the central parts of the water-conducting tissues, and that the soil must be sufficiently charged with water. The cold causes a contraction of the tissues, and diminishes turgescence and the permeability of the cell-walls to water. As the contents of the peripheral ends of the medullary rays freeze, expand, and are pressed forward, the stem splits at the point of least resistance, and the ice forms a layer covering the whole surface of the wound, the internal pressure supplying water which is drawn up by capillary forces. In many plants, however, splitting of the stem does not occur, and further investigation and explanation is required in such cases (*Bot. Gazette*, xix, 321).

Preservation of Urine.—The tendency of urine to decomposition, more especially in the Summer, frequently interferes with the making of a proper analysis. Huguet (*Jour. de Pharm. et de Chem.*) rejects all the preservatives heretofore used such as naphthol, salol, salicylic acid, etc., on the grounds that they are either too insoluble, that it is necessary to use them in too large quantity and that they may vitiate the results of subsequent analyses. Huguet proposes the use of either of the three following solutions, 2 Cc. [about 85 drops] of which should be placed in a large bottle in which the urine for twenty-four hours is to be collected:

- 1.—10 grammes of mercuric chloride, 1 gramme of sodium chloride and 100 Cc. of water.
- 2.—5 grammes of mercuric iodide, 10 grammes of potassium iodide, and 100 Cc. of water.
- 3.—10 grammes of mercuric cyanide, and 100 Cc. of water.

Filtration of Water.—P. Miquel publishes the results of a series of experiments bearing upon the sterilization of water by filtration, performed with a modified arrangement of the Chamberland bougie. The space between the bougie and its enclosing case was filled with coarse sand, and before the water was admitted it was passed through a cylinder, 0.10 M. long, which contained a layer of fine sand, 0.07 M. thick, and another of animal charcoal, 0.08 M. thick. The water was sterilized at 100° C. prior to the experiments, and for purposes of comparison a second Chamberland bougie was used in the ordinary way, the filtered products from the two being tested side by side. While the filter enveloped in sand delivered water showing no trace of bacteria until the twelfth day, when 60 per Cc. were present, that passing through the other was found to contain 20 per Cc. on the second day, and the number increased rapidly subsequently. Again, while the flow of water from the naked bougie was reduced to half by the fifth day, that from the sand enclosed one had increased on the fifteenth day to double what it was on the first (*Journ. de pharm. et de chem.*, [5], xxx, 219).

The Estimation of Glycerin in Fluid Extracts.—According to the Pharmaceutische Centralhalle the estimation of glycerin is at all times a fairly difficult process, unless the glycerin be practically free

from any other organic matter; hence any work on the subject is very welcome. Linde recommends the following: Ten grammes of the extract are concentrated to 5 grammes. The residue is dissolved in 50 grammes of distilled water; subacetate of lead solution is added drop by drop, until no further precipitate is formed. This is filtered off and washed, to the filtrate a few drops of weak H₂SO₄ are added, and then phosphotungstic acid in strong solution. The liquid is again filtered and the filtrate is neutralized with weak soda solution. It is now evaporated to the consistency of a thick syrup, which is treated with 30Cc. of a mixture of equal volumes of ether and alcohol. The residue after separation is now filtered and the filtrate is washed with the ethereal mixture, and then evaporated till of constant weight. The residue is almost pure glycerin, with traces of coloring matter. A correction of 5 per cent. may be added for loss during evaporation.

Carissa Ovata.—A variety of this somewhat rare plant (var. *stolonifera*, F. M. Bailey) has been subjected to examination by Dr. T. L. Bancroft, of Brisbane. He has extracted from the plant a crystalline principle which is very bitter, and is apparently a glucoside. The crystals are very soluble in water, less so in dilute spirit, slightly soluble in absolute alcohol, and insoluble in ether or chloroform. Strong sulphuric acid gives no coloration with the crystals, but ammonia gives a yellow color. Auric chloride and tannin give slight precipitates with the solution of the crystals, but mercuric chloride gives none, nor does potassium iodide of mercury. The crystals are deliquescent, and when exposed in a thin layer to the air for a few days they assume a green color. They reduce an alkaline solution of cupric oxide. At first Dr. Bancroft suspected that the principle might be identical with ouabain, since the genus *Carissa* is closely allied to *Acokanthera*, and the alcoholic extract of the bark rapidly killed frogs when subcutaneously injected, the heart stopping in systole and the muscles being pale and paralyzed. He now believes, however, that it is quite distinct chemically. Dr. Bancroft suggests that the allied species, *C. xylopiaron*, which is used in Mauritius in diseases of the urinary organs, might be worth a trial in Europe, the Brisbane plant being scarce.

Preservation of Sublimate Solutions.—L. Vignon, continuing his work on this subject (*Pharmaceutical Journal*) points out that the decomposition of sublimate solutions is principally due to alkaline substances in the water employed or the glass of which the recipients are formed, a limited quantity of such alkaline matter sufficing to cause the precipitation of a relatively considerable amount of mercury. On the other hand, hydrochloric acid and alkaline chlorides increase the stability of such solutions, the first by saturating the alkaline precipitants, and the chlorides by their solvent power. As the result of a series of experiments he finds that ammonium chloride prevents precipitation by ammonia or albuminoid matter in the water, but fails to prevent the action of soda or sodium carbonate. Sodium chloride, on the other hand, fails in the case of ammonia and soda, but prevents precipitation by sodium carbonate and albumin. By combining the chlorides of ammonium and sodium, therefore, precipitation by any of the substances mentioned is prevented as well as by hydrochloric acid. The two formulae recommended are as follows:—(1) Mercuric chloride, 1 Gm.; ammonium chloride, 20 Gm.; sodium chloride, 10 Gm.; distilled water, 1 litre. (2) Mercuric chlo-

ide, 1 Gm.; hydrochloric acid (at 22° Baumé) 1 Cc.; distilled water, 1 litre.

Extract from the Sixth Edition of Dieterich's Pharmaceutical Manual.

(Continued from page 222.)

Veterinary Remedies, Continued. Lame Shoulder.

LINIMENT.

	Parts.
A.—Spirit of soap.....	50
Spirit of camphor.....	50
Ammonia.....	50
B.—Oil of Spanish flies.....	50
Ammonia.....	50
Oil of turpentine.....	50
Rape oil.....	100

For Strained Sinews.

TOPICAL APPLICATION.

	Parts.
Ammonium chloride.....	50
Spirit of camphor.....	50
Vinegar.....	1000
Water.....	3000

Mix and apply on a cloth morning and evening for at least eight days.

RESOLVENT EMBROCATIONS.

	Parts.
A.—Tincture of capsicum.....	150
Alcohol, 90 per cent.....	200
Spirit of camphor.....	100
Spirit of ether.....	100
Oil of turpentine.....	10
Ammonia water.....	20
Ammonium chloride.....	50
Sodium chloride.....	20
Water.....	350

Dissolve the salts in the water and add this solution last.

	Parts.
B.—Spirit of ammonia.....	100
Spirit of camphor.....	10
Spirit of ether.....	10
Oil of turpentine.....	10
C.—Sodium chloride.....	50
Spirit of camphor.....	50
Tincture of arnica.....	100
Water.....	200

Shake up the embrocation well. Dilute half a pint of the fluid with a pint and a half of water and with this wash the entire length of the leg and then wrap it up in a woolen bandage.

Spavin.

SALVE FOR LIGHT CASES.

	Parts.
Mercurial ointment.....	30
Salicylic acid.....	10
Lard.....	60

Rub the spavin daily with the ointment for a week.

Foot Spavin.

LINIMENT.

	Parts.
Green soap.....	150
Spirit of ammonia.....	30
Petroleum oil.....	20
Tincture of cantharides.....	20

Rub daily for one or two days, then skip two days and repeat the application.

Running Thrush.

WASH.

	Parts.
A.—Chlorinated lime.....	100
Water.....	1,000
B.—Alum.....	50
Copper sulphate.....	50
Carbolic acid.....	10
Water.....	500
C.—Alum.....	50
Copper sulphate.....	50
Pyroligneous acid.....	250
Water.....	250

First wash the affected parts with a solution of soap, rinse with clear water, and then wash with a warmed solution of chlorinated lime. Then dip some lint in the warmed solution and place this on the affected surfaces. Repeat the application once daily.

TINCTURE.

	Parts
Salicylic acid.....	5
Glycerin.....	20
Tincture of aloes.....	100
Tincture of nutgall.....	100

Wash off the hoof with warm soap and water and paint the thrush with the tincture. Then moisten some lint with the tincture and press it into the crevices between the swellings. Apply once a day.

Constipation.

Constipation is, as a rule, due to unsuitable diet, but also makes its appearance as an accompaniment of other diseases, colic, for instance, often producing it. In cases of simple constipation the usual cathartics and clysters may be administered. The treatment in connection with colic has already been given under the head of colic.

Rhus Toxicodendron.*

By H. M. WHELFLEY, PH.G.

Rhus toxicodendric acid, isolated by Maisch, is now generally recognized as the active medicinal and poisonous principle of the plant. The prevailing opinion that this acid exists to a greater extent in the fresh than in the dried drug is evidenced by the Pharmacopoeia directing the fresh plant. Goss says that the fresh leaves are the best; Potter believes that the dried leaves will generally prove inert, while Woodbury asserts that the dried leaves are worthless.

The writer being easily affected by the toxic properties of the fresh plant determined to give the dried drug a practical test. The result leaves not a shadow of doubt in his mind, for the handling of the dried and compressed plant produced the well known eruption. Since making the above test I have learned that workmen who handle the drug in the manufacture of fluid extracts are poisoned by it. So I conclude that while the poisonous action of rhus toxicodendron may be impaired by drying it, it is not altogether destroyed.

I am informed by the wholesale trade that practically no demand exists for the dried drug, while the sale of the fluid extract is limited. Out of 35,515 prescriptions filled in different parts of the state and reported to the Illinois State Pharmaceutical Association by A. E. Ebert, but four called for fluid extract of rhus toxicodendron and one specified the tincture. Neither Bartholow nor Hare mention the drug in their works on therapeutics. Shoemaker says it is rarely employed by the regular practitioners. Hausmann refers to it as an obsolete drug, while Wilcox claims it is dangerous and probably useless.

The medical virtues of the plant were announced by the aborigines and vaunted by many of their successors. It was first used in England in 1798. The medicine has been recommended for nocturnal incontinence, palsy, cutaneous diseases, delirium, herpes zoster, old ulcers, acute, subacute and chronic rheumatism, ozena, sciatica, tympanitis, paraplegia, chorea, paralysis, chilblains, erysipelas, stings of insects, typhus, burns, typhoid fever, eczema and pemphigus.

ANTIDOTES IN RHUS POISONING

The poisonous action of the fresh plant is well known and the antidotes are as numerous as the diseases in which the drug has been administered. Among them are a light and cooling regimen, solution of chlorinated lime, cold lead water, sodium hyposulphite, saline purgatives, saturated tincture of lobelia, Monsell's solution, magnesium carbonate, sodium

sulphite, solution iron perchloride, hamamelis, stramonium, sassafras, elder, boneset, gelsemium, dulcamara, serpentaria, spice bark, oak bark, tannin, bismuth subnitrate, alum, potassium chlorate, phenol, oxalic acid, copper sulphate, lime water, linseed oil, opium, strong coffee, rest, laxatives, potassium permanganate, bryonia, and verberna.

Syrup and Solutions of the Saccharated Oxides of Manganese and of Iron.

Dr. F. Gerhard (*Apoth. Ztg*; 1894, ix, p. 624) considers Dieterich's method of preparing these syrups as not quite satisfactory, and the finished products as objectionable owing to their disagreeable alkaline taste. He recommends the following formulas as yielding palatable and but slightly alkaline preparations.

1.—SYRUP OF SACCHARATED OXIDE OF MANGANESE,

containing 2 per cent. of manganese and 50 per cent. of sugar: Dissolve 10 parts of potassium permanganate in 500 parts of distilled water, and add, for solution, 60 parts of powdered sugar (or 100 of simple syrup). Set aside for several hours, until a brown gelatinous precipitate has formed; then heat the liquid several times to ebullition, and filter off the manganese hydroxide. Wash this by once pouring distilled water over it, and express the precipitate a little, until it weighs about 80 parts. Mix this with 87 parts of powdered sugar and 8 to 4 parts of soda solution (sp. gr. 1.160), and heat over an open fire or on the water-bath until a clear syrup is obtained, and then add distilled water until the whole amounts to 174 parts.

2.—SYRUP OF SACCHARATED OXIDE OF IRON, containing 2 per cent. of iron and 50 per cent. of sugar: Precipitate 80 parts of solution of ferric chloride (Ph.G.) with sodium carbonate (as in the preparation of saccharated oxide of iron of the Ph.G.); wash the precipitate, and triturate it with 75 parts of powdered sugar and 4 parts of soda solution (sp. gr. 1.160); heat the mixture over an open fire or on the water-bath until a clear solution results, which is either boiled down or admixed with distilled water—as the case may require—until it weighs 150 parts.—Neither of these syrups should have more than a barely appreciable alkaline taste or reaction; and this will be the case, it is maintained, if not more than the above prescribed quantity of soda solution is used. Should it, however, be otherwise, owing to more soda solution having been used the alkalinity should be overcome not by the addition of an acid but with the aid of powdered potassium-bi-tartrate, which is to be admixed with the syrup and the mixture then set aside, under repeated stirring, until the alkaline taste has disappeared. The excess of cream of tartar is then allowed to settle, and the syrup is then carefully decanted. A palatable syrup may thus be obtained, it is stated

8.—SOLUTION OF THE SACCHARATED OXIDES OF IRON AND MANGANESE,

containing 0.6 per cent. of iron and 0.1 per cent. of manganese: Take

	Parts.
Syr. sacch. oxide iron (as above).....	300
Syr. sacch. oxide manganese (as above).....	50
Distilled water.....	470
Cognac.....	100
Alcohol (90 per cent).....	75
Tinct. orange peel.....	3
Aromatic tincture.....	1
Tincture cinnamon.....	1
Tincture of vanilla.....	1
Acetic ether.....	5 drops to each kilo (say quart)

This solution is said to be clear, of a beautiful brown color and a very agreeable taste, and quite stable.

The Interaction of Borax, Carbonates and Polyhydric Alcohols; Also, the Composition of Borax.*

By LYMAN F. KEBLER, PH.C., B. S.

Philadelphia, Pa.

It was profoundly stated by Lord Bacon that "In all generations and transformations of bodies, we should inquire what is added, what remains and what is lost; what is united and what is separated." This is the true character of inductive philosophy, careful observation and rigid analysis. These sentiments are applicable to the questions in hand as well as to the many difficult problems constantly inviting our sober thoughts.

From statements made in certain lines of literature we are led to infer that on mixing borax, sodium bicarbonate and glycerin, a certain chemical reaction ensues in which there are formed normal sodium carbonate and carbon dioxide. This is equivalent to saying that there is no interaction, as far as the carbonate is concerned, when a normal alkaline carbonate is employed instead of the acid carbonate.

Recently the writer had occasion to establish the presence or absence of sodium bicarbonate as an adulterant in a sample of borax. After having exhausted all the available tests of any standing without any definite results, recourse was sought in the above reaction, but it was soon discovered that the same reaction resulted with the normal carbonate, only less energetic. Being somewhat surprised at this unexpected phenomenon, the writer made an investigation, and soon found that the same result was reported some six years ago by C. Jehn.

D. Klein,² and the same year A. Senler³ and A. J. G. Lowe showed that an acid reaction resulted when borax is dissolved in glycerin. W. R. Dunstan⁴ also made a comprehensive report on the reaction of polyhydric alcohols and borax. The acid reaction results not only with the polyhydric alcohol glycerin, but also with many other polyhydric alcohols, as mannitol, erythrol, levulose, dextrose, glucose, α-galactose and β-galactose. Undoubtedly many other polyhydric alcohols, as sucrose, raffinose, lactose, dulcitol, quercite, etc., would produce the same results if subjected to the proper conditions.

It is reported that borax is even decomposed by water, for Rose⁵ has shown that strong solutions of this salt give precipitates of silver borate, while dilute solutions precipitate argentic oxide, like an alkali.

The acidity is unquestionably due to the transformation of the borax into sodium metaborate and boric anhydride, the latter uniting with water to form boric acid. As significant evidence substantiating the above statement, may be noted that no acid reaction results in the absence of water, for on using anhydrous borax, anhydrous glycerin and elevating the temperature so as to expel the water formed during the reaction, no acid reaction results.

* American Journal of Pharmacy.

¹ National Dispensatory, 5th Ed., page 14:5.

² 1888, Arch. der Pharm., (3) 26, 495; Am. J. Pharm., 60, 455.

³ 1876, Bull. Soc. Chim., 20, 195; Comp. rend. 86, 826.

⁴ 1878, Pharm. J. Trans. (3), 8, 819.

⁵ 1863, Pharm. Trans. J. (3), 13, 257; Am. J. Pharm., 55, 447.

⁶ Mendeleeff's Principles of Chemistry, Eng. Ed. Vol. 2, p. 60.

* Read before the American Pharmaceutical Association.

The first equation represents the reaction when there is no water present, that formed being expelled by heat; the second when water is present; the third

Unfortunately we do not possess, in the inorganic field, an invaluable polariscope.

The table will also be found of service in the case of solutions of powerful alkaloids and salts, in determining at a glance the exact quantity of the medicament in each prescribed dose of the mixture. For example:—take a prescription calling for 6 fluid ounces of a 1 in 1,000 solution of iodine trichloride,—to be administered in doses of 1 fluid dram. By referring to the table, it will be seen not only that 3 grains of iodine trichloride are required to fill the recipe, but also that each dose of the latter—1 fluid dram—contains $\frac{1}{16}$ grain of the medicament.

Rule.—To find the number of grains (Apothecaries weight) required to make solution of any given percentage, first find the quantity of solution to be made, as given on the top line of table, then by referring to the percentage column, find the percentage desired. Draw lines at right angles on the table from the quantity and percentage figures selected, and the answer will be found where the lines intersect. *M. M. R.*

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College Place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25, 1899.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Fourth Series of Questions.

31. Specific gravity is the relative weight of equal volumes of different substances; usually referred to water as a standard, and is based upon the laws that:

A.—Fluids bring up all solids with a force equal to the weight of liquid displaced.

B.—Floating bodies displace their weight of liquid, immersed bodies their bulk.

32. Specific gravity is determined in several ways, as by:

A.—Hydrostatic balance (for solids only).

B.—Specific gravity bottle (for liquids and solids).

C.—Loaded cylinder (for liquids only).

D.—Hydrometer (for liquids only).

A.—Hydrostatic balance: This is merely an accurate prescription balance, so arranged that one of the pans is suspended by shorter cords, and has a hook attached to the bottom, from which a substance may be suspended by means of a thread, etc., for the purpose of weighing the substance in water.

There are four methods of use. First, for solids insoluble in, and heavier than water:

Divide the weight in air by the loss of weight in water (the weight of an equal bulk of water), the quotient is the specific gravity.

Second.—For solids soluble in, and heavier than, water. Weigh the substance in air, and again in a liquid of known specific gravity, in which it is insoluble; the difference represents the weight of an equal volume of the liquid used. By rule of proportion, determine how much water this represents and then follow the rule and divide the weight on air by the loss of weight in water.

Third.—For solids lighter than, and insoluble in water.

As a floating body displaces its own weight of water, it is necessary to attach a heavy body to immerse it, before we can arrive at the weight of an equal volume of water. Consequently it becomes necessary to attach a heavy body sufficiently large to sink the lighter, to one arm of the balance, and counterpoise it; to the cord from which it is suspended, the light body is attached, which, on account of the buoyant power of the water, raises the heavy weight; now the weight required to restore the equilibrium of the balance must be added to the weight in air, the sum representing the weight

of an equal bulk of water; on dividing the weight in air by this weight, the specific gravity is obtained.

4th.—Proceed as in the above, using a liquid that is not a solvent for the substance, and multiply the result by the specific gravity of the liquid.

B.—Specific Gravity Bottle: This is the simplest and best method of taking the specific gravity of liquids. It consists of a flat bottom globular flask with slender neck, on which a mark is placed to indicate the level of the liquid: A counterpoise of the exact weight of the flask accompanies it. To find the specific gravity of a liquid: Divide the weight of the contents by the weight of an equal bulk of water.

To find the specific gravity of a solid: Divide the weight in air, by the weight of an equal bulk of water.

C.—The Loaded Cylinder: This is used to find the specific gravity of dense viscid liquids—such as balsams, oils, etc., that are not easily removed from Specific Gravity Bottles or Hydrometers. It is made of glass, or some metal that will sink.

1.—Weigh the cylinder in air, then in water and note the loss, which is the weight of an equal bulk of water.

2.—Weigh in the liquid under consideration and again note the loss, which is the weight of an equal volume of the liquid.

3.—Having the weights of equal volumes of water and the liquid under consideration, divide the latter weight by the former.

D.—Hydrometers (for liquids only): This is a glass tube with a graduated stem, having a bulb at the lower end, loaded with mercury or shot, to keep the instrument in an upright position.

33. The specific gravity of a piece of lead which weighs 228 grains in the air and 208 grains in water, is 11.4, for it loses 20 grains by immersion and applying the rule, divide the weight of the body by its loss of weight in water we will have $228 \div 20$ or 11.4 the specific gravity.

34.—If a crucible weighs 749 grains in air and 714 grains in water then its loss of weight by immersion is 35 grains and the specific gravity is $\frac{749}{35}$ or 21.4 which is the specific weight of platinum of which the crucible is made.

39.—If a bottle holds 500 grains of water and when filled with another liquid its weight is 6750 grains, then the specific gravity of the liquid will be found as follows: 500 grains of pure water is to 1 the specific gravity of water as 6750 the number of grains of liquid in the bottle is to 13.5 the specific gravity of the liquid or $500:1::6750:x$ or 13.5 mercury is the liquid.

40. If a two-litre flask holds 30864 grains of a liquid, the specific gravity is 1 and the liquid is water.

66. What is the cambium layer and what are its functions?

67. What are the medullary rays?

68. What are galls, and how are they formed?

69. In what part of the plant is oil most generally secreted?

70. In what part of the plant are resins generally secreted?

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make us of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, it uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Where a City Board Certificate is Accepted.—F. G. S. writes: "I passed an examination before the Board of Pharmacy of New York City, October, 1886. Will you kindly inform me where the certificate will entitle me to practice pharmacy."

The certificate of the city board only entitles the holder to practice within the boundaries of the county of New York. By presenting the certificate to the boards of Kings County (Brooklyn), Erie County (Buffalo) or to the State Board, the holder will be registered without examination.

Infant Laxative.—A. writes: "Please publish a formula for a good laxative for children; one in liquid form and palatable in taste preferred."

Syrup of senna in halfteaspoonful doses is the laxative commonly employed.

A syrup composed of

Extract Cascara	℥d	℥v
Glycerin	℥ss	℥v
Syrup	℥ss	℥v
Aque q.s.	ad	℥i

is also frequently prescribed to young infants in the dose formulated. If this be not sufficient, the dose may be increased till the desired effect is produced. Ringer recommends the use of podophyllin resin. He dissolves 1 grain of the resin in 1 dram of alcohol and administers 1 or 2 drops of the solution on a piece of sugar to infants 1 or 2 months old, 2 or 3 times daily. Sodium phosphate is an excellent laxative for children. It is given in 5 or 10 grain doses mixed with the food.

Poisonous Proprieties.—H. H. B. inquires if it is lawful to compound private remedies or dispense proprietary remedies containing morphine.

It is not lawful to compound private remedies containing morphine, unless the regulations of the Penal Code concerning the sale of poisons are complied with. Patent medicines are exempt from the provisions of the code and nostrums containing morphine and other narcotic poisons may be freely dispensed providing the composition of the compound is kept secret. While this is the law it does not appear that any decision has ever been rendered touching the responsibility for the sale of nostrums containing poisonous ingredients.

Questions; Seventh Series.

PHARMACOGNOSY.

61. What is cork and how is it formed?

62. What is the basis of the formation of vegetable gums, and in what parts of the plant are they most largely developed?

63. What is the fundamental form of all cells?

64. What is the difference between parenchyma and prosenchyma, in a general way?

65. By what means are the inorganic salts absorbed from the soil, and what or-
gan is most active in this absorption?

NATIONAL WHOLESALE DRUGGISTS' ASSOCIATION

TWENTIETH ANNUAL MEETING,

NEW YORK CITY, 1894.

FIRST SESSION.

MONDAY EVENING.

The annual meeting of the National Wholesale Druggists' Association was convened in Delmonico's Twenty-sixth Street building, in this city, on Monday, Oct. 1, at 8:30 p. m., by President Frank A. Faxon, of Kansas City, who opened the proceedings with a brief address in which he made many complimentary allusions to the city in which the association had elected to hold its twentieth annual convention. He then introduced Darwin R. James, president of the New York Board of Trade and Transportation, who on behalf of the Chamber of Commerce and the board of which he is president, welcomed the association to New York.

COMPLIMENTS FOR THE MEMBERS.

"I esteem it a great honor," said Mr. James, "to extend the welcome of our municipality to such a representative body of business men. Just at present we are passing through a rather critical period in our municipal life, but we always have time to extend cordial greetings to such bodies as yours when they honor our city with their presence."

Mr. James alluded to the well-known public spirit and enterprise for which the wholesale drug trade and the manufacturers of proprietary medicines have always been noted. He also spoke of the late William A. Gallatly, the first president of the National Association, whom, he said, he had known intimately, Mr. Gallatly having been a member of the drug section of the Board of Trade and Transportation.

Mr. James complimented the drug trade on the good work it had done in aiding the work of having the Sherman bill repealed, and he expressed the hope that the association would continue to make itself felt in the cause of sound money.

"There is not a body of men anywhere," concluded the speaker, "that is better informed on the principles of a sound currency than the members of your association."

MAIN PROMISES A GOOD TIME.

Thomas F. Main, second vice-president of the association, bade the delegates wel-

come on behalf of the Drug Trade Section of the Board of Trade and Transportation.

"After you have listened to the distinguished gentleman who has preceded me," said Mr. Main, "it is unnecessary to extend a formal greeting. But," he added, with a twinkle in his eye, "I can promise you a good time informally. We may not have the beautiful things in the way of big lakes and other things to show you that they had last year in Detroit,



Frank A. Faxon,

Retiring President of the National Wholesale Druggists' Association.

but in an humble manner we will endeavor to do our best, and I hope when you go away you will say that we made your stay reasonably pleasant."

NEW YORK QUITE A TOWN.

M. N. Kline, of the Smith, Kline & French Company, Philadelphia, responded on behalf of the Association in a bright speech. While he deplored the hopeless condition of New York in its struggle to keep up with Philadelphia, Mr. Kline said, he was

willing to concede that this was quite a town, and he was glad to be in it. He expressed the hope that the present convention would give the same impetus to the organization as was given by the last convention held here, in 1883.

PROGRAMME OF EVENTS.

The committee of arrangements and entertainment reported at this stage through Chairman John M. Peters. He outlined the arrangements which had been made for the transaction of business and entertainment of the members and their friends as follows:

Tuesday.—9 o'clock A.M., business session of Proprietary Association, at Delmonico's; 11 o'clock A.M., second session of the National Wholesale Druggists' Association; 1 o'clock P.M., luncheon for members in attendance at the business session will be served in the room adjoining the meeting room; 2 o'clock P.M., third session of the National Wholesale Druggists' Association; 9 o'clock P.M., President's reception at Delmonico's from 9 to 12 o'clock. Supper will be served at 11 o'clock.

Wednesday.—10 o'clock A.M., fourth business session of the National Wholesale Druggists' Association; 11 o'clock A.M., drive for the ladies through Central and Riverside Parks, and luncheon at Claremont; 1 o'clock P.M., luncheon for members in attendance at the business session will be served in the room adjoining the meeting room; 2 o'clock P.M., fifth business session of the National Wholesale Druggists' Association; 4 o'clock P.M., second session of the Proprietary Association; 8 o'clock P.M., theatre party for members and ladies, to Abbey's Theatre.

Thursday.—10 o'clock A.M., sixth business session of the National Wholesale Druggists' Association; 11 o'clock A.M., carriage drive and inspection of the steamship Lucania by the ladies; 1 o'clock P.M., luncheon for members in attendance at the business session; 2 o'clock P.M., seventh and final business session of the National Wholesale Druggists' Association; 6:30 o'clock P.M., banquet for members at Delmonico's; 8 o'clock P.M., theatre party for the ladies to the Lyceum Theatre.

Friday.—10 A.M., steamboat excursion; the steamboat Sandy Hook will leave the pier at the foot of Twenty-second street, North River, at 10 o'clock A.M.; guests may go on board from 9:30 to 10 A.M.

SISTER ASSOCIATIONS.

The president then announced that credentials were before him from a number of allied associations, including many state pharmaceutical associations and the Interstate Retail Druggists' League, and called upon Henry Canning, president of the League, to speak for it.

THE INTERSTATE LEAGUE.

Mr. Canning prefaced his remarks with a brief allusion to the admirable organization which characterized the N. W. D. A. and ventured to hope that an organization of similar stability may be possible under the plan of the League. He traced the growth of the League in New England and said they had succeeded in perfecting its organization up to the borders of New York. To be successful, however, the League must be national, therefore an effort was being made to bring New York city into line. He told of the four gentlemen who had been sent on from Boston to canvass the druggists of this city, and instanced the success of one with whom he had spoken immediately before coming to the meeting. The canvasser referred to had visited seventy retail druggists during the day and had secured

He announced the meeting of retailers to take place Wednesday evening, in Mott Memorial Hall, and said he looked for a large attendance of proprietors and wholesale dealers.

J. C. Eilil, the second vice-president, followed Mr. Canning, and in a few well-chosen words, commended the latter's efforts to organize the retail trade. He said that Mr. Canning was doing good work, and he hoped it would succeed.

Arthur Basset addressed the convention as the representative of the State of Michigan, the regular delegate, A. S. Parker, being absent.

A. Cressy Morrison spoke for the State of Wisconsin, and H. N. Coxe, as the representative of Pennsylvania, told of the good that had been accomplished in his State through organizing the retail trade. He said: "Go where you may, and you will find that the influence and power of a city rests with the retail dealers."

Dr. Frederick Humphreys addressed the meeting and in the course of his remarks referred to the progress of the Association, dwelling with particular emphasis on the different plans which had been tried in the past for controlling the dis-

SECOND SESSION.

TUESDAY, OCTOBER 2.

President Faxon read his annual address as soon as the meeting had been called to order. Among other things he said:

"Eleven years have passed since we met in convention on Manhattan Island. The membership of the association has increased largely in the interval. Many new faces are seen."

NEW YORK BUSINESS MEN.

"On this narrow island has existed for 100 years the metropolis of this country,

THE COUNTRY SAFE.

"Congressional torpor, coal strikes, railroad boycotts, populism, Coxeyism and every other vicious ism have conspired to work against the material interests of the country. It has seemed as if a union of hostile forces had been evoked by some evil power to test the stability of the government. This crucial ordeal has brought its compensation. It has proved that this nation is stronger than any weapon that can be brought against it."

WEATHERED THE STORM.

"Notwithstanding the long period of depression, I have yet to learn that a single wholesale drug house has been wrecked. This shows able and conservative management. I wish it also argued, generous profits."

TO RESTRICT THE MEMBERSHIP.

"I believe that the best interests of this organization require that closer restrictions should obtain in the admission of members. Under Article IX, every individual engaged in the manufacture of a proprietary medicine is eligible to membership in the association. What is the full meaning of this? There are thousands of individuals and firms in this country who manufacture proprietary medicines who operate with a capital of \$500. There are scores of them in every large city, and the villages have them. In the United States there are 35,000 retail druggists. No matter how important or worthy any of these might be as drug merchants, they could not enter our organization, but the least of them, if the maker of a proprietary medicine, would be eligible to membership."

"This is not as it should be. It is not in harmony with the original plan of the association. The manufacturers of proprietary medicines, and others will, I trust, permit their names to remain on the active list. My recommendation is in no manner directed against them, and I hope I shall not be misunderstood. I do believe, however, that we should return to first principles. Article IX is too all-embracing."

Mr. Faxon referred at length to the good work accomplished by the committee on proprietary articles, of which M. N. Kline is chairman.

NEW MEMBERS.

The report of the committee on nominations for membership was then presented by J. C. Fox, of Atchison, the chairman, who reported the following new members, active and associate: John A. Robinson & Co., Troy, N. Y.; C. H. Martin, of Concord, N. H.; A. Perry Fitch, Concord; Hurlbut, Ward & Co., Des Moines, Iowa; Lippman Brothers, Savannah; C. E. Potts Drug Company, Wichita, Kan.; Behrens Drug Company, Waco, Texas; H. H. Hay & Son, Portland, Me.; The C. J. Lincoln Drug Company, Little Rock, Ark.; Thurston & Bradish, New York; W. J. M. Gordon Chemical Company, Cincinnati; John F. Neill, Boston; Fox, Fultz & Webster, Boston; Bullock & Crenshaw, Philadelphia; George W. Plumly Company, Philadelphia; Carr-Lowry Glass Company, Baltimore; David E. Greene, New York City; Pheno Caffein Company, Worcester, Mass.; El Madito Cigar Company, Jacksonville; Pickard, Thomas & Co., New York, and the Oakland Chemical Company, New York.



Thomas F. Main,

President of the National Wholesale Druggists' Association.

Thomas F. Main is a native of Greenwich, England, where he was born in 1848. He came to the United States at the age of eighteen, and after being employed in a general store in the interior of New York State for a while became engaged in the retail drug business. Here he attracted the favorable attention of one of the firm of Tarrant & Co., of this city, and was invited in 1869 to accept a position with this house.

On coming to New York city Mr. Main at once matriculated at the New York College of Pharmacy, graduating at the close of the regular two years' course. Since that time he has always been a devoted friend of the college and an ardent worker for its best interests, having served for a long time on its board of trustees.

His natural executive ability, coupled with tireless energy and excellent judgment brought him rapidly to the front in his house, until, in 1879, he was made superintendent of the establishment, and when, in 1884, the firm was reorganized as a stock company, Mr. Main was elected president, an office which he still holds.

Mr. Main has found time to take an active interest in the affairs of the New York Board of Trade and Transportation, of which he is a director, and also in those of the American Pharmaceutical Association.

tribution of supplies. He instanced the rebate plan as the most successful of the many plans yet devised. The doctor spoke in a reminiscent vein of the Association and the progress of the system of distribution.

H. B. Harding, speaking for the Proprietors' Association, pointed out the good work done by that body in securing the repeal of the stamp tax.

The convention then adjourned to meet next morning at 11 o'clock.

and here for other hundreds of years is the metropolis likely to remain. In a sense, New York is ours. It belongs to all of us equally. She is our commercial and financial center. The merchants of New York as a class, have been from early days men of integrity, dignity, and solidity. Enterprise and courage have been their characteristics. Our entire country owes them much—owes much to their commercial activity, their constant loyalty, their unflinching patriotism.

SECRETARY MERRIAM'S REPORT.

The report of the secretary was then submitted. In presenting this report Mr. Merriam made brief reference to the events of the years associated with his office. He made allusion to the meeting in New York in 1883, and touched upon the choice for president of a distinguished citizen and representative merchant—W. A. Gallatly. Mr. Merriam said: "His sudden death a few weeks following the close of his administration was universally regretted and the poet's tribute to the author can justly be given to him.

"One knew him but to love him,
Or named him but to praise."

Delegates had been appointed during the year to represent the Association at the meeting of the different State Pharmaceutical associations.

He said he could not overestimate the importance in this manifestation of courtesy to the representative gathering of retail druggists throughout the country.

Mr. Merriam reported that the correspondence during the year had been of the same general interest as previously reported. He stated his desire to express through his report his grateful acknowledgment to the publishers of the pharmaceutical and other trade journals for many courtesies extended the Association, not only in the free contribution of their publications, but as gallant champions of the Association's interests.

The state of the membership as reported in the last published proceedings was 442. This was a gain of 15 over the preceding years, and to that date confirms a statement in a previous report that every year since the organization of the "Western Wholesale Drug Association" in 1876, there has not been a report published that

Northwest there are but three exclusively wholesale druggists with an aggregate population of 300,000.

The number of jobbers in dry goods and groceries in the cities referred to amounted to 22, and the proportion, Mr. Merriam said, is probably maintained in other large cities.

S. M. Strong then submitted his report as treasurer of the Association. The balance in the treasury was very low, un-



Col. Alfred B. Scott,

President of the Association of Proprietors and Dealers in Proprietary Articles.

usually large expenditures having been made during the year in defending the suit brought against the Committee on Proprietary Articles by a Cincinnati firm of "cutters."

FOR FREE ALCOHOL.

The Committee on Legislation made a full report of the efforts which had been put forth to secure enforcement of the act recently passed, taking the internal revenue tax off alcohol. They had corresponded with Secretary Carlisle on the subject, and the following communication, which had been drawn up for them by ex-Governor Boutelle, of Maine, and forwarded to Secretary Carlisle and Commissioner Miller, was read:

LETTER TO SECRETARY OF THE TREASURY.

NATIONAL WHOLESALE DRUGGISTS' ASSOCIATION,
WASHINGTON, D. C., Sept. 13, 1894.

To the Honorable the Secretary of the Treasury, and
to the Honorable the Commissioner of Internal Revenue:

GENTLEMEN—In conformity with the understanding that was had at the interview with you on the 4th inst., and in behalf of the National Wholesale Druggists' Association, the following views are respectfully submitted in regard to the regulations to be prescribed by the Secretary of the Treasury for the execution of Section 61 of an act entitled "An Act to reduce taxation, to provide revenue for the government and for other purposes," viz.:

1. The law appears to have defined the meaning of the word "manufacturer" for all the purposes of the statute. He must be a user of "alcohol in the arts or in any medicinal or other like compound," and in the use of such alcohol he must have so procured it in defined quantities as to be able to exhibit and deliver "up the stamps which show that the tax has been paid thereon." It thus appears while the word "manufacturer" is defined there are limitations to the application of the word so defined, and to persons who use alcohol for the purposes prescribed, and who procured it in such form that the stamps can be produced as evidence of the right of the claimant to a "rebate or repayment of the tax" which he may have paid thereon. It is understood by us that the total contents of every package for which a claim for rebate can be sustained must have been used in the manner and for the purposes prescribed in the statute.

2. While it appears to be essential to the due execution of the law that any applicant for a rebate or re-

payment of the tax should be able to show that such alcohol has been used in the "arts" or in a medicinal or other like compound, it does not seem to be necessary, in the preparation of the regulations, to attempt by enumeration or by rules to define the practical meaning under the statute of the word "arts" or of the phrase "in any medicinal or other like compound," inasmuch as, in the disposition of such an application for rebate, the department can reach a more satisfactory result by dealing with the particular branch of business which may be covered by the word "arts," and may also decide satisfactorily whether a particular preparation is medicinal or a compound which in its nature is like a medicinal compound.

3. It appears to be the requirement of the statute that a party using alcohol for the purposes mentioned must satisfy the Collector of Internal Revenue for the district in which he resides or carries on business that he has complied with the regulations, in order that the party may be entitled to receive the rebate or repayment of the tax which may have been paid, and it is assumed that the regulations will specify the nature of the evidence to be furnished to the Collector.

4. It is also assumed that parties who may apply for the benefits or privileges of the statute will be required to furnish bonds for the fulfillment of all their duties and for an exact compliance with the law and with the regulations of the department.

5. It is assumed, further, that the execution of any regulations which may be established will be attended with expenses for the payment of which no appropriation has been made. Under this head it is suggested that a graduated tax or fee might be laid upon manufacturers for the purpose of providing a fund in the hands of the Secretary of the Treasury, from which any additional expenses might be met.

6. It may not be out of place for us to say that the parties that we represent are greatly interested in the subject to which this communication relates. At the present moment we are unable to proceed to the manufacture of goods in quantity, not knowing but that we may be compelled to put our products upon the market in competition with articles made from free alcohol. We are therefore anxious for an early announcement of the regulations.

On the day following, the interview was had with Secretary Carlisle and Commissioner Miller, and with some introductory remarks by the chairman, the paper was read and presented to the Secretary, who listened attentively and stated that the suggestions should receive the careful consideration of the Department, giving the committee to understand, however, that



James E. Davis,

Ex-President of the National Wholesale Druggists' Association.

the law would not go into effect until regulations were framed and promulgated. Also that free alcohol could not be used except upon application and under the authority of a permit or license issued by the Treasury Department, and furthermore, he might consider it necessary for all supplies of free alcohol to be obtained through a bonded distillery warehouse.

The impression left upon the commit-



John M. Peters,

Chairman of the Committee on Entertainment.

did not show a pleasing increase of members each succeeding meeting. He doubted if reports of other business organizations covering so long a period of time can show a similar condition, but while a comparison is made, it must be noted that the percentage of wholesale dealers represented in Secretary Merriam's reports is very small, compared with jobbers in dry goods and groceries. In two ambitious cities in a prominent State in the

tee was that the secretary and commissioners were favorable to the execution of the law, and they intended to have the question disposed of without unnecessary delay.

THIRD SESSION.

TUESDAY AFTERNOON.

After recess, the members listened to reports from the committee on paris green, the committee on proprietary goods, the committee on adulterations (given in full on another page), and from the committee on credits and collections.

A nominating committee for the selection of officers for the ensuing year, was



A. B. Merriam,
Secretary of the N. W. D. A.

appointed by the president as follows: Wm. Hull Wickham, chairman; Harry B. Gilpin, W. J. Walding, M. N. Kline and Chas C. Goodwin.

On motion of Mr. Kline, the report of the Board of Control was made a special order for 11 o'clock next day.

FOURTH SESSION.

WEDNESDAY MORNING.

The proceedings of the fourth session are always of the greatest importance, the Board of Control usually presenting at this session its report on the recommendations contained in the address of the president and the reports of the different committees. The report of the Committee on Proprietary Articles invariably precipitates a vigorous discussion and this day's proceedings proved no exception to the rule. The members were somewhat slow in coming together, due probably to the festivities of the previous evening.

It was 11 o'clock when President Faxon called the convention to order, and received the supplementary report of the Committee on membership.

BOARD OF CONTROL'S REPORT.

The report of the Board of Control came next. Taking up the report of the Committee on Proprietary Medicines, it submitted the following series of resolutions for the consideration of the Convention:

COMMITTEE ON PROPRIETARY GOODS UPHOLD.

Resolved, That we hereby reaffirm our determination to uphold the contract plan, pledge our fullest and most loyal support to its provisions, and insist upon its being maintained in its integrity by each and every member of the organization.

Resolved, That experience convinces us that the Detroit plan is entirely feasible, and the adoption of the principles of that plan should be strongly urged upon all proprietors, as we believe them essential to the proper maintenance of the contract system.

Resolved, That we also repeat our conviction that as a measure of protection to retailers and as a means of preventing cutters, either at wholesale or retail, from obtaining supplies of proprietary articles at a discount, no contract goods should be sold at full rebate discount to dealers who are not doing a legitimate jobbing business.

Resolved,—That our committee on proprietary goods be requested to revise the list of dealers entitled to wholesale agencies under the foregoing resolution, and that proprietors who have not already done so will again be urged to furnish a list of their quantity buyers so as to make this list complete, which list, after being accepted by a similar committee from the Proprietary Association, shall control transactions under proprietors' contracts, and no other shall be accepted by proprietors at a discount from dealers not on the list until passed upon by the representatives of the above-named committee.

Resolved, That our committee on proprietary goods notify our members of the action of those proprietors who, after having again had their attention called to this matter, continue shipping to the Cincinnati cutter, or to those who supply him, and notify such proprietors that their articles will be taken from the rebate list, and in publishing the official list of rebate articles issued by this association such names will be omitted therefrom.

Resolved, That our committee on proprietary goods be authorized to continue the aggressive work against cutters inaugurated during last year, and to enable them to do this effectually, means fully adequate to produce assistance be placed at their disposal.

Resolved, That we pledge our support and co-operation to the retailers in the laudable efforts to organize under the Detroit plan, and request our proprietary committee to give any aid in their power to increase and perfect the organizations formed by retailers for the regulation of the prices of proprietary articles.

Resolved, That in view of the confusion arising from the quarter dozen clause not being adopted by all the proprietors, we urge upon proprietors who have not yet inserted this proposition in their contracts to do so.

The first resolution, regarding the contract system, was passed without any debating or argument, but the second resolution, commending the Detroit plan, was the subject of a discussion in which representatives of both retail and wholesale houses throughout the country took part. Henry Canning, of Boston, had several strong objections to it. When Mr. Canning got through speaking Thos. A. Cobb obtained the floor. During the course of his speech he said that his firm in Chicago did not live up to the rules regarding the rebate or contract plan, because they found too much difficulty in enforcing



M. N. Kline,

Chairman of the Committee on Proprietary Goods.

them. This brought out a murmur of disapproval from nearly every member present, and about half a dozen persons asked permission from the chairman to speak. J. C. Elliel, of Minneapolis, got the floor and severely rebuked the policy of the Chicago houses in not living up to the rules and regulations of the association of which they were members. His speech brought forth loud applause, and when the resolutions offered by the Board of Con-

trol were put to vote, they were passed without any opposition.

The next report taken up by the board was that of the committee on credit and collections. The system contains, say the board, many important and valuable suggestions which, if they could be put into effect, would be of immense advantage to the trade. In this respect the drug trade encountered many advantages that the other trades did not.

THE PROFITS OF BUSINESS.

Among other valuable items of information contained in the committee's report



Dr. R. V. Pierce,

Retiring President of the Association of Proprietors and Dealers in Proprietary Articles.

occurs the following which is worthy of special mention as affording interesting statistics regarding the expenses of conducting business. The report states that up to within a comparatively few years the wholesale drug business has been considered a profitable one, "but," it goes on, "the times seem to have changed, and year by year the business has seen an increase in volume without a corresponding increase in profits. On the contrary, while the business has grown, the profits have remained at about the same point and many firms to-day are doing a business of two and three times that of twenty years ago, yet the total net profit is no greater than on the former volume of trade.

COMPARED WITH THE GROCERY BUSINESS.

Evidently there is a reason for this and in searching for it, the committee have compared the wholesale drug business with our nearest neighbor, the wholesale grocer.

We find after careful inquiry from all sections of the country that the average retail druggist of the country sells 25 per cent. of his goods on credit, and 75 per cent. for cash.

The average retail grocer sells 80 per cent. on credit, and 20 per cent. for cash. Yet the retail druggist is allowed, on the average, about thirty days more time by his jobber than is allowed the retail grocer by his jobber.

The expense of the wholesale grocery trade, based on the volume of trade, is estimated at 3 per cent.

The expense of the wholesale drug business is estimated at 11 per cent.

The estimated net profit of the wholesale drug trade, based on the volume of trade, is estimated at 3½ per cent. to 4 per cent.

Where the wholesale grocer can do business with few and comparatively low priced assistants, the wholesale druggist is obliged to have a full corps of skilled and expert assistants.

You may ask what bearing these figures have upon credit. Our reply is, that the general method of management and conduct of business reflects very largely indeed upon what should be their methods of credit.

GROCERS GIVING UP PATENT MEDICINES.

Wholesale grocers, who have been selling patent medicines, are to-day, as a rule, giving them up. Why? Because the loss by breakage and the increased expense and loss of time entailed by repackaging goods, together with many other minor details and annoyances, which they claim do not belong to their business, have induced them to eliminate this line from their stock.

LOSSES IN CLOSING OUT.

The great loss which would accrue to a wholesale druggist should he desire to close out his business, is sometimes lost sight of.

It is generally conceded that if the wholesale provision dealer should close out his business, it could be done within a very limited time, say within thirty days, and his loss upon stock would be less than two per cent.

The wholesale grocer, closing out under like conditions, would probably do so within sixty days, at a loss not exceeding 3 per cent.

The loss to the wholesale druggist under similar conditions, would be from 33 to 40 per cent.

REPORT ON PRESIDENT'S ADDRESS.

The committee on president's address submitted the following report:

Resolved, That the association endorse the action of the president in collecting but ten dollars as "dues" from the associate members.
Resolved, That article IX of the constitution be changed so as to read "any firm engaged in the wholesale drug business may on recommendation of the committee on membership and election by the association become a member of this association upon subscribing to the constitution and by-laws and payment of ten dollars initiation fee and an annual due of twenty-five dollars.
 Election of members shall be by ballot.



E. M. Hance.

Individuals, firms or companies engaged in business collateral or kindred to the drug business may be admitted as associate members in the same manner as provided for the admission of members, except that the annual due shall be ten dollars. Associate members to enjoy all the privileges of membership except that they shall be allowed to vote only on the time and place of meeting.
 Any assessment in addition to the regular dues shall be levied only on the active members.

For the purpose of revising the membership list it is *Resolved* That the treasurer when sending out his notice of annual dues be instructed to notify members other than wholesale druggists, that having acquired active membership under the Montreal amendment they may maintain their active membership by the payment of dues and assessments levied against active members. Upon receipt of notice that they elect to become associate members, their names will

be placed upon that list. It being understood that wholesale druggists are not eligible to associate membership.

Resolved, That article XIII of the constitution be amended by adding to the words "on infringing of trade marks" the words a "committee consisting of the president of the association, the chairman of the board of control, and the treasurer, whose duty it shall be to levy an assessment upon the active members of the association whenever the condition of the treasury requires it."

With reference to the remarks of the president concerning request for increased discounts from proprietors on rebate goods, your committee would say that as this question will form a part of the report of the committee on proprietary goods, that it will under that report receive proper consideration.

Your committee asks that as action on that part of the report which relates to the change in the constitution can-



B. T. Fairchild.

not be taken until twenty four hours after such change has been suggested, action on the whole report be placed first on the calendar for Thursday morning's session.

FREE ALCOHOL.

The important question of free alcohol came up for final action in the following important resolution offered by the Board of Control, and which was adopted after some discussion:

The Board of Control wishes to express their satisfaction with the report on the work of the committee on Legislation and recommend that the N. W. D. A. reassert its request for free alcohol for medicine and the arts. We recommend that the incoming Committee on Legislation follow with rigor the work of the previous Committee and take all possible means in urging the Treasury Department to place the law in operation at the earliest possible moment, and in case the Treasury Department should decline to execute the law on the ground of its inability to formulate regulations for its enforcement, or for the reason that no appropriation was made for its execution; that the committee use their utmost efforts to have the law so amended as to render its enforcement possible. We therefore offer the following resolution for the consideration of the Association:

Resolved, That the N. W. D. A. earnestly deprecates the delay on the part of the Treasury Department in issuing such regulations as will make available the recently enacted law for free "alcohol in the arts and in medicinal or other like compounds" has already occasioned great uncertainty and loss on the part of those intended to be benefited by its provisions. We therefore respectfully urge that such regulations be promulgated without further delay.

Resolved, That the legislative committee be empowered to secure the services of such legal assistance as in their judgement is needed to carry out the foregoing resolution.

M. N. Kline, of Philadelphia, opposed the resolution. He thought the matter should be left over for the next Congress to act upon.

F. L. Carter, of Boston, said that in his opinion the committee on legislation knew more about the matter than anyone else, and he thought it should be left for the committee to dispose of.

A. S. Brooks, of Detroit, didn't believe that all the members of the association were in favor of free alcohol. He didn't think that the law was practicable, and that it could not be carried out.

G. F. Weller, of the Board of Control, said that considering the standing of the

association heretofore on this matter it could not do other than make the recommendations it had.

DELAY EXPENSIVE.

E. A. Bigelow, of Lowell, Mass., said that the failure of the treasury department to many manufacturers a large sum of money—money which under the law rightfully belonged to them. There were, he said, certain manufacturers, about whom there was no question as to their right to have free alcohol; manufacturers who made nothing but medicine, and the nature of whose business was known. He thought the secretary of the treasury could make regulations in these cases where there was no doubt as to the proper use of alcohol. Those regulations were wanted and they were wanted immediately.

Henry R. Strong, of the "National Druggist," followed with an eloquent and vigorous address in which he insisted that the law was mandatory and it was not the business of the secretary of the treasury to interfere with its operation. It was his duty to enforce it. He said in part "It is the duty of all interested in this matter to bring all the pressure possible to bring about the operation of the law."

"The drug journals, manufacturing chemists and others all owe it to themselves to move for the speedy promulgation of regulations by which alcohol may be distributed to manufacturers free of duty."

There were other speeches for and against the reduction, but an adjournment was taken at this point to give the room to the Proprietary Association, which met immediately after the convention adjourned.

FIFTH SESSION.

THURSDAY MORNING.

The first business taken up when the session opened at 11 o'clock was the report of the Committee on Commercial Travelers, presented by its chairman, M. Cary Peter, of Louisville. His report dwelt on the importance of the drummer in trade and the part he plays in prompt-



Thos. Doliber.

ing trade throughout the country. The following is an excerpt:

CUT DOWN DRUMMERS.

"The immense improvement in the methods of conducting the wholesale drug business that has grown out of our association, the great benefits that all of us have derived from a personal acquaintance with our friends in the same vocation needs but to be mentioned to recall to mind how steadily we have

moved in the right direction. The committee is led to believe that the curtailment of the number of travelers and of their powers to upset the established rules of business would largely diminish the unsatisfactory condition which at present exists in many sections of the country."

REPORTS OF COMMITTEES.

The Committee on Drug Markets, J. D.



Alanson S. Brooks.

Titworth, chairman, made its report, which was accepted.

The Committee on By-Laws, George A. Kelly, Pittsburg, reported recommending that assessments to make up deficiencies occasioned by defenses of actions looking toward a suppression of cut prices, should be levied upon the members of the association without any exception. Fred. L. Carter, of Boston, in the absence of Mr. Kelly, read the report and recommended its adoption.

M. N. Kline of Philadelphia moved that the association levy an assessment upon the proprietary members to make up the deficiency in the treasury. The point he made was that the association has been put to a great expense during the last year in defending actions brought by cutters—defenses which were made solely in the interest of the patent medicine men. He did not think it was fair to assess all the members.

Mr. Doliber, of Boston, said the proposition of Mr. Kline was class legislation. The association was formed for the mutual benefit of all. While it was true that the manufacturers had had more aid from the association than the other members, the time might come when these others would need the loyal support of the patent medicine men. There was some further debate, but Mr. Kline's motion was defeated by an overwhelming majority.

AN HONORARY MEMBER.

The Membership Committee brought in their report at this point, and after the new members proposed had been declared elected, F. W. Schulte, of Kansas City, was proposed for election to honorary membership and was admitted by a unanimous vote.

BAILEY BANKRUPTCY BILL CONDEMNED.

A resolution introduced by the Board of Control condemning the Bailey Bankruptcy bill, and declaring that it was greatly inferior to the Torrey bill, and

urging the incoming committee on legislation to work for its defeat, was passed.

Another resolution condemning the Pure Food bill was also passed.

DELEGATES FROM THE STATE ASSOCIATION.

Credentials were received from Mr. McIntyre, of New York, as the representative of the New York State Pharmaceutical Association. He was introduced to the members and put everyone in a good humor, by a witty and amusing speech.

THE NEW OFFICERS.

The committee on nominations reported as follows:

President, Thomas F. Main, New York. First Vice-President, Theo. F. Myers, St. Louis; Second Vice-President, W. J. Walker, Albany; Third Vice-President, B. D. Phillips, Nashville, Tenn.; Fourth Vice-President, Fred L. Carter, Boston; Fifth Vice-President, J. D. Price, Columbus.

Secretary, A. B. Merriam, Minneapolis (re-elected).

Treasurer, S. M. Strong, Cleveland (re-elected).

Board of Control, C. F. Weller, chairman, Omaha; M. C. Peter, Louisville;



Wm. R. Warner.

F. A. Faxon, Kansas City; E. W. Cutler, Boston, and B. T. Fairchild, New York.

The Committee on Time and Place of Meeting recommended that the next convention be held in Denver, Col., the latter part of September.

A motion that the Association become a member of the National Transportation Association was referred to the Board of Control with a favorable recommendation and power to act.

Bowles Colgate announced that the manufacturing perfumers had taken advantage of the meeting to hold a little convention of their own.

Two conferences were held, resulting in the formation of the Manufacturing Perfumers' Association of the United States. Officers were elected as follows: President, Bowles Colgate, New York; vice-president, Alfred G. Wright, Rochester, N. Y.; secretary and treasurer, Henry Dalley, Jr., New York; executive committee—J. H. Winkelmann, Baltimore; Theo. Ricksecker, New York; James E. Davis, Detroit; F. F. Ingram, Detroit, and Mr. Eastman, Philadelphia. A constitution was adopted and the first annual meeting fixed for the first Tuesday in February.

SIXTH SESSION.

THURSDAY AFTERNOON.

At the afternoon session the report of the Committee on Nominations was approved, and the newly-elected President of the Association, Thos. F. Main, was escorted to the chair. In accepting the office he said that he would look after the interests of the organization to the best of his ability. In carrying on the work he said he would have to rely upon the other officers and the individual members of the Association.

The newly-elected vice-presidents all made speeches, in which they promised to guard carefully the interests of the organization.

Frank A. Faxon, the retiring President of the Association, turned over the gavel to the new executive, and there being no further business before the convention an adjournment was taken, the next meeting to occur on the steamer Sandy Hook on the following day, when the Association took a cruise around the bay.

THE BANQUET.

The banquet of the National Wholesale Druggists' Association was held in Delmonico's large ballroom on the evening of Thursday, October 4. Covers were laid in the ballroom proper for 248 guests, but the gathering overflowed into every room on the same floor—and the attendance would have been still more numerous if there had been space enough for all who wanted to come. Over 400 covers were laid. With the terrapin came a disposition to make vocal music, precipitated by the refrains of "Dixey" and other patriotic measures.

AN INTERESTING GATHERING.

Everything that good taste and wealth could dictate had been employed to add splendor to the animated scene. The floral decorations were lavish without being marred by vulgar ostentatiousness. The music was of high character, and the table ornamentations were of the most attractive character.



Dr. Frederick Humphreys.

The menu was in keeping with the magnificent company. As a souvenir of the occasion an elaborately-engraved menu card, bound, was distributed to the guests. Portraits of all the Presidents of the association from the time of its foundation, in 1876, down to the present time were given in half-tone, every picture being a true likeness. Suitable sentiments were inscribed under the photo-

graphs. The service was as follows:

Huitres.
Portage.
Tortue verte claire.
Hors D'œuvre. Timbales Dumas.
Poisson.
Sea Bass Marinier.
Pomme de terre tartelettes.
Relève.
Filet de bœuf au Madere.
Tomatoes farcies.
Entrées.
Alles de poulet Madeline. Pettis pois française.
Terrapin a la Delmonico.
Sorbet Prunelle.
Rôt.
Grouses.
Salade de laitues.
Entremets de Douceur.
Pommes, Seymour. Pieces Montees. Liqueurs.
Glaces fantaisies. Fruits. Cafe.

Geo. M. Olcott of this city was toast master and discharged the functions of his position with noticeable ability. On either side of him as named below, were representatives of well known firms of wholesale druggists and manufacturers and prominent citizens of New York:

A. B. Merriam, Geo. S. Davis, E. Waldo Cutler, John McKesson Jr., Rev. E. Walpole Warren, Geo. A. Kelly, Hon. Charles S. Fairchild, Frank A. Faxon, Thomas F. Main, Chauncey M. Depew, J. Seaver Page, Hon. A. W. Arnoux, R. V. Pierce, Dr. Wm. Jay Schieffelin, J. C. Eliel, S. M. Strong. President-elect Thos. F. Main was at his left, and Frank A. Faxon, ex-president was at his right. The regular toasts responded to were as follows:

"Our Association," Frank A. Faxon; "Trade Organizations," J. Seaver Page; "Woman," the Rev. E. Walpole Warren; "The City of New York," Chauncey M. Depew; "Amenities of Business Life," J. C. Eliel of Minneapolis.

Charles S. Fairchild, ex-Secretary of the Treasury, was to have spoken on "Sound Finance a Necessity for Business Prosperity," but he was unfortunately called out of town at the last moment.

TOAST MASTER'S ADDRESS.

George M. Olcott, the toastmaster, in



J. C. Eliel,

First Vice-President of the N. W. D. A.

his introductory remarks, referred to the meeting eleven years ago when the N. W. D. A. met last in New York, and the fact that it took eleven years for New York's turn to come again showed the growth of the country and the splendidly successful organization which has grown up with

it. Mr. Olcott proposed the toast "Our Country," whereupon the orchestra struck up and the two tallest men in the trade, Lewis L. Pope, of Cleveland, and W. A. Gilligan, of London, Eng., stood on chairs waving the American flag, amid uproarious applause. Thomas F. Main, was then introduced to respond to the toast "Our Association."

SPEAKING TO "OUR ASSOCIATION."

The gentlemen at the tables were in a most enthusiastic mood, and greeted Mr. Main in such a cordial manner that it was some time before the new President could make himself heard. When something like quiet had been restored, Mr. Main told his hearers how glad he was to see them.

"It seems to me," he said, "that this Association requires no one to speak for it. It speaks for itself. As long as the association continues to pursue the broad principles which have characterized it for the past twenty years, it may safely be relied on to look after the best interests of its members. With their able assistance, the officers elected this afternoon hope to carry its business along in the same energetic manner as it has been carried along in the past."

THAT "TIRED FEELING."

After Mr. Main had finished Mr. Olcott



Col. Brent Good.

introduced ex-president Faxon, who made a spirited address, that fairly sparkled with wit, and which kept his hearers in a roar of laughter. He said:

"After we got home from the theatre last night I met some royal New Yorkers. In an evil moment we also fell in with Dr. C. I. Hood of Lowell. We took something for that "tired feeling." It has cured others, but it did not cure me. I went to bed determined to prepare a speech to-night worthy of the occasion. This morning, however, I felt so entirely different that I only had time to jot down a few notes. Now, even those are of no use. I forgot my glasses, and cannot see them. But I assure you I have a great speech here if I only had the key to the combination.

"Ours is a noble association of which I am proud to be a member. A great many good things have come from the West. This association came from the West, and the country has cause to be grateful to our section for it.

"I do not wonder that the citizens of this metropolis are stuck on this town. (Loud laughter.) A gentleman told me yesterday he would rather be a lamp-post in New York than be the Mayor

of any other place. And he didn't come from that great rest-cure resort, Philadelphia, either.

"There have been times when I yearned for the cooling shades of the moons and the purple glades of other planets, but, having been in New York, I have concluded that this little old earth is good enough for me."

The two presidents were followed by J. Seaver Page, who talked about "Trade Organizations."



John McKesson.

Mr. Page's speech was heartily appreciated, and he closed with some wholesome advice against American hurry and worry.

CHAUNCEY M. DEPEW'S TOAST.

When Mr. Depew was introduced to speak in response to the toast "The City of New York," the entire assemblage rose and cheered. He said he intended to write a book on introductions, since he had so often been made the victim of felicitous ones, like that of Mr. Olcott, who had just presented him.

"I have probably been the victim of more felicitous introductions," he said, "than any man alive. The things that I never could get are always recited.

THE CONFIDING BRITISH PUBLIC.

"Mr. Faxon has told you also about the difficulties of preparing speeches, and since that pleasure has been denied me, I am left without any excuse."

"Nothing pleases me so much, however as to prepare impromptu speeches. (Laughter.) When I was over in England, during the last year, among other things which passed their dividends were the industrials that had been unloaded on a confiding British public. Now, they always have titles over there of some sort to smooth the ruffled feelings of stockholders, and the Bishop and Earl and Member of the House of Commons who were in the directory of Warner's Safe Kidney Cure Company when it was announced that a dividend would be passed did not like it very much, but the inference drawn by the London newspapers was that a panic in the United States was a kidney cure in itself." (Loud Laughter.)

THE BUSINESS OUTLOOK.

After this pleasant rally, Mr. Depew stated a most significant fact regarding the business outlook." He said:

"For the first time in my experience of railroad, extending over a period of

thirty years, I find that the west-bound traffic is superior on all our lines to the east-bound traffic. Stated as a bald fact this means little. But analyzed, it means that business is reviving marvelously.

"The great bulk of ordinary traffic is from the West to the East in ordinary

steamboats in American waters, to the strains of one of the finest military bands in existence, and cheered by a ten-course luncheon, served on board by Delmonico in his best style, the National Wholesale Druggists' Association wound up its week of business and pleasure in New York City.



C. Graham Bacon.

times, consisting of food products bound to the great Eastern centers and to the seashore for foreign shipment. The freight that goes West consists of manufactured products. This excess in west-bound shipments means that enormous stocks of manufactured goods are going out for distribution. It means that prosperity is returning—that the little stores throughout the West are filling up their shelves for a big Fall trade.

The Rev. Dr. E. Walpole Warren, of Holy Trinity Church, spoke to the toast "Woman," which he treated with sympathy, tact and good feeling. One of the conclusions which he said he had arrived at after seven years' residence in this country, in violation of the Contract Labor law (laughter), was that American women for wit, good dressing and the "eternal feminine," are the finest in the world. (Applause.)

Ex-Secretary Fairchild, on account of illness, was not able to be present, and for his toast, "Sound Finance a Necessity for Business Prosperity," ex-Judge Arnoux proved an acceptable substitute.

THE AMENITIES OF LIFE.

The last speaker was the first vice-president, J. C. Eliel, of Minneapolis, on the subject of "Amenities in Business Life."

THE EXCURSION.

With an excursion on one of the fastest

Like everything else arranged by the local Committee on Arrangement and Entertainment, the closing incident of the convention was unequalled in the history of trade gatherings or gatherings of any kind in point of magnificence and completeness. The steamboat Sandy Hook, which reels off twenty knots an hour without much effort, had been chartered by the committee to take visitors and their wives and daughters on an excursion about the harbor. Music was provided by the full band of the Seventh Regiment, and the entire lower deck of the big vessel was transformed into a huge dining room by Delmonico, covers being laid for 520 persons at one sitting. The table service was as complete as if the guests had been seated in the dining room of the famous establishment at Fifth Avenue and Twenty-sixth street.

"It seems to me," said Chairman John M. Peters of the committee, "that I have been individually thanked 5,000 times on board this boat."

Mr. Peters made this declaration when it was proposed to pass a formal vote of thanks, and when he had almost been dragged to the rear end of the main saloon, where the delegates assembled with their wives to give expression to their ideas of the abounding hospitality with which they had been treated from the moment they set foot on Manhattan Island.

Mr. Peters protested against the proposed formal vote of thanks, and with much reluctance his plea was permitted to prevail. The Sandy Hook started at 10.30 o'clock A. M., from the foot of West Twenty-third Street. It had been proposed to start at 10 o'clock, but a number of the members were late, and the committee would not hear of leaving anybody behind. Finally, however, when it was thought that every one who intended to take part in the excursion was on board, the order was given to cast off the lines, and the Sandy Hook swung out into the stream. She had hardly gotten away from the pier when J. C. Eliel, the accomplished toast master of the Association, hove in view in charge of a party of ladies. Mr. Eliel is one of the most popular men in the Association, and as soon as he was espied, the committee unhesitatingly ordered the boat back to take him up. Mr. Eliel and his charges scrambled on board, receiving a warm greeting from the committee. Afterward Mr. Eliel, in a neat speech of thanks, which he was called upon to make, in behalf of wives and daughters of the visitors, who insisted that their sincere acknowledgements should be made to the committee for the many favors shown them during their stay, acknowledged the favor by saying:

"I never flattered myself that I was good looking. I knew that my face would stop a clock, if the clock was properly exposed to its influence, but I never knew before that I could stop a steamboat."

After her second start the Sandy Hook pointed her nose down stream, and soon rounded the Battery and went up the East River as far as the navy yard, where a stop was made to give the visitors a good look at the men-of-war lying at anchor there. Then the course was shaped toward the open sea. But soon after passing the Narrows the members of the committee concluded that their luncheon would not receive the proper sort of attention if the trip was continued in that direction.

In order to prevent a spread of the malady, the boat was hastily ordered about, and, instead of going to sea, as intended, she steamed up the Hudson. The seasick persons, with the aid of expert treatment and judicious doses of champagne, soon recovered in the smoother waters of the Hudson, and when luncheon was served, at 12:30 o'clock there were not more than two or three people who could not respond with appetites splendidly sharpened by the sea air.

The luncheon menu was as follows:

Huitres.	
Consomme en tasses.	
Homard a la Newberg.	
Filets de boeuf aux olives farcies.	
Haricots verts sautes.	
Cotelettes de volaille a la creme.	
Petits pois a l'Anglaise.	
Sorbet Romaine.	
Perdreux au cresson.	
Foies-gras a la gelee.	Salade de laitue.
Croute aux ananas.	
Gelee aux pistaches.	Orientale.
Glaces fantaisies.	Charlotte vanille
Fruits.	Petits fours.
Cafe.	

After luncheon a meeting of the association was held in the saloon, at which President Main presided.

Mr. Main reiterated his appreciation of the honor that had been paid him in selecting him to succeed President Faxon, and paid a special compliment to the ladies who crowded the salon, on their

fine appearance. As a New Yorker, Mr. Main said, he had always been accustomed to seeing lots of pretty women, but he had never seen an assemblage in which the fair sex was so well calculated to rouse the enthusiasm of the sterner sex.

M. N. Kline of Philadelphia followed, and offered a set of resolutions that expressed in glowing terms the appreciation of the delegates of the royal manner in which they had been treated by the New Yorkers. Then Mr. Eliel made his response for the ladies.

J. Seaver Page, who was hailed as "Our Chauncey" by Brent Good, was asked to respond for New York. He said he was particularly pleased to do so, as he was the only man in the convention who had not made gibes at the restful City of Philadelphia, from one of whose most distinguished representatives the laudatory resolutions had emanated. There was a roar of laughter at this, and Mr. Kline retreated to the outskirts of the crowd to hide his blushes.

Some one shouted for "Brent Good!" when Mr. Page had finished, but Mr. Good could not be persuaded to talk in public, and the next cry was, "Scott! We want Scott!"

Mr. Scott went forward and told the guests of his committee how glad the members had been to do everything in their power for them.

"It has been a pleasure to wait on you," he said, and everybody knew he meant it. "I wish we could have you with us again next year."

Chairman Peters was next called, and he closed the meeting, after telling the visitors that when they come again they will find the New Yorkers as eager to receive them as they have been during the present convention.

At 4:30 o'clock P. M. the Sandy Hook returned to her dock, having gone as far as Tarrytown, and the members fled out over the gangplank, expressing the hope all around that they would meet again in Denver, where the convention will hold its session in 1895.

treasurer, which, on motion, took the usual course.

THE INTERSTATE LEAGUE.

The reception of delegates was then taken up, and Henry Canning, president of the Interstate League, was asked to favor the meeting with an address.

Mr. Canning recounted the steps taken by the officers of the League to organize the retail trade of the Eastern States and extended a warm invitation to all present to attend the mass meeting called for the day following. The appointment of a nominating committee was taken up next, and President Pierce selected the following gentlemen: Joseph Leeming, E. G. Wells and E. G. Bigelow.

The Proprietors' Association then adjourned, and gave the floor to the second session of the National Wholesale Druggists' Association.

The final session of the Association was held Wednesday afternoon when the reports of several committees were submitted, including that of the Committee on President's Address by E. A. Bigelow, as follows:

REPORT ON PRESIDENT'S ADDRESS.

By a vote of the Association at the meeting held yesterday the interesting and able address of President Pierce was referred to the Committee on Trade Interests.

As chairman of that committee I wish at this time to call the attention of the members to the valuable suggestions contained in Dr. Pierce's remarks. His theory that large advertisers might do well to pool their interests and a number of them place their orders through one agent employed exclusively by themselves is entitled to more than a passing notice, and we hope its discussion here may develop the idea, and that it may materialize in the saving of thousands of dollars, now annually paid out in advertising, a large portion of which may at least be characterized as of uncertain value.

There were many other good points and suggestions in the address which we would commend to your consideration, notably the subject of legislation, free alcohol, etc. The matter of profitable advertising is mentioned in the hope that some remarks may be elicited from experienced advertisers which will throw light upon the apparently paradoxical condition which Dr. Pierce points out as existing among the newspaper fraternity, namely: That the cheaper paper gets and the harder the business pressure the higher go the rates for advertising.

Your committee recommends that a special committee be appointed by the chair to investigate and report upon the subject of co-operative advertising and report at the next annual meeting.

Dr. V. Mott Pierce, who is the son of Dr. R. V. Pierce, read a paper on a proposed co-operative system of distributing proprietary medicines which aroused considerable interest.

A NOVEL PROPOSITION.

This paper proposed a plan by which the wholesale druggists and drug jobbers are to be cut off entirely from the handling of proprietary medicines. Dr. Pierce said that the manufacturers should organize a system of distribution of their own, dealing directly with the retailers. This, he said, could be done if all the manufacturers of proprietary medicines co-operated in the establish-

ASSOCIATION OF MANUFACTURERS AND DEALERS IN PROPRIETARY ARTICLES.

The business proceedings of the second day of the annual convention of the National Wholesale Druggists' Association opened at 9 o'clock with a session of the Association of Manufacturers and Wholesale Dealers in Proprietary Articles, R. V. Pierce, president, in the chair.

CO-OPERATIVE ADVERTISING.

This heading sums up the essential features of the presidential address delivered by Dr. Pierce. In it he makes a proposition which must attract the attention of all advertisers of proprietary articles. He suggested that the members of the association, who spend millions of dollars annually co-operate in the handling of this advertising direct.

"No one," he said, "would be harmed by this except a small army of special agents and middlemen who live like princes and take an annual outing to Europe at our expense. Such co-operation need not partake of the character of a monopoly or a trust. It would simply achieve for us the best results. We could learn from an interchange of ideas a great many things regarding advertising methods that would be mutually beneficial. I was asked recently by a certain magazine to write an article on 'What I Know about Advertising.' I declined, and frankly stated that the greater my experience became as an advertiser, the less I knew about the subject, and I was sure that what I did not know about it would fill a large volume.

"I have no doubt that if we could pool our interests and co-operate for the mutual benefit of those willing to join in such a movement as I have briefly hinted at, each would be found to have had some experience that would prove valuable to all concerned."

On motion of Thos. F. Main, the address was referred to the committee on trade interests, composed of the following members: E. A. Bigelow, chairman, Lowell, Mass.; John M. Ives, Rochester, N. Y.; H. B. Harding, New York; M. N. Kline, Philadelphia, Pa.; Charles C. Goodwin, Boston, Mass.; S. M. Sterrett, St. Louis, Mo., and A. Herbert Hostetter, Pittsburg, Pa.

The report of the Committee on Legislation was submitted by C. C. Voorhies.

Mr. Voorhies said the committee had succeeded in preventing the imposition of a stamp tax on patent medicines. They had also dealt with the Southworth bill in this State in such a manner that it died of its own worthlessness. "The Press Censorship" bill at Washington had also been knocked out by the committee, and the Hatch so-called "Pure-Food bill," which Mr. Voorhies characterized as a "most pernicious measure," had also been practically killed off.

H. M. Sharp addressed the gathering after Mr. Voorhies finished reading his report. He said he desired to correct a statement contained in the report regarding the moribund condition of the Hatch pure food bill. "I think it is very much alive," he said, "and should be closely watched."

The report of the committee on Trade Marks, dealing chiefly with the efforts of the members to prevent violation of trademark laws, was read by Secretary Leeming.

The Committee on Trade Interests reported through its chairman, E. A. Bigelow. The report was largely made up of recommendations urging upon the members to hasten the enforcement of the new tariff regulations concerning the use of duty-free alcohol in the manufacture of medicinal compounds. The effort of legislators and others to regulate the sale of proprietary medicines were characterized as so many blackmailing schemes.

At the suggestion of Dr. V. Mott Pierce, of Buffalo, Chairman of the Committee to Attend the Various Pharmaceutical Associations for 1894, Mr. Main reported for that committee.

Mr. Main said that, to his surprise, the American Pharmaceutical Association had adopted resolutions at its last meeting against free alcohol in the arts, going back on its own record for the last twenty years.

H. B. Harding submitted his report as

ment of central depots in about 150 places, with distributing agents. In the smaller places, one local retailer could be made distributing agent, Dr. Pierce declared, to handle the goods on a 5 per cent. margin.

Following this a resolution was introduced protesting against the delay on the part of the Treasury Department in making regulations for the admission of free alcohol.

ELECTION OF OFFICERS.

The following officers were elected for

the ensuing year: President, Alfred B. Scott; First Vice-President, M. N. Kline of Philadelphia; Second Vice-President, R. E. Quinn, Louisville; Third Vice-President, Thomas Doliber of Boston; Fourth Vice-President, C. C. Goodwin, Boston; Secretary, Joseph Leeming, New York; Treasurer, H. B. Harding, New York; Executive Committee, R. V. Pierce, Brent Good, H. M. Sharp, George A. Kelly, F. B. Shedd, and E. T. Hazeltine.

The Association then adjourned to meet in Denver, September, 1895.

patient and said 'Now let us put on the screws!' It was cruel of them to make any demand at the time they did, for the cutter was well able to procure all the supplies he needed in adjoining markets. If they had waited until New York and Boston had been secured it would have been different. I would recommend in all instances of this kind, that members give local jobbers the benefit of all business until complete organization is effected."

CRITICISM ANSWERED.

Some in the trade have objected to the agitation carried on by the officers of the League as unprofessional. They had been told that they should not stoop to boom patent medicines. To this Mr. Canning made answer that "we must take things as we find them. There was a market for these goods and while discrimination might be observed, no good reason exists why their sale should be discouraged. There were other things which might be regulated by the League. The physicians' supply house business in particular. The agents of these firms approach physicians and tell how great a saving can be effected by dispensing their own remedies. But this is not all; they could exert a favorable influence in matters of legislation. There is not a year but pernicious legislation is introduced. We can prevent this pernicious and advance beneficial legislation. I state these things to show what may be accomplished through concerted action.

THE CLUB IN OUR OWN HANDS

"If the rank and file of the retail drug trade were organized they could snap their fingers at the proprietors. Now that they have made such an advance in New York, the great commercial center of the country, the club is practically in your own hands. Might is right! I might as well talk plain. Why have we failed hitherto? This is a question that naturally comes up. There was the Camplon plan, so promising of good results; why did we not succeed with that? Why because we were not properly organized; we must come together to accomplish anything.

MR. CANNING TO THE PROPRIETORS.

Mr. Canning then made a statement in which he said "I wish to explain to the proprietors in the room and in plain terms the impressions that I have derived from my attendance at the meeting of the Association of Manufacturers and Dealers in Proprietary Articles this afternoon. Having been granted the privilege of the floor I sought to interest the members by recounting the progress of the League and asking for their co-operation in advancing its objects; but there was little attention paid to my remarks. Perhaps they were tired with the long session for I heard a motion to adjourn while I was speaking. I informed the convention of the success of the movement in New York and asked the single question. 'How far will you go, gentlemen, before you accept our plan and put it into operation?' The answer I received to this was: 'When you carry out your promise and organize the whole country.' I mentioned the need which existed for financial aid, and asked if the proprietors would give them the aid which we sought and was informed by the chair that under their by-laws the association could make no appropriation for this purpose.

CONTINUE TO ORGANIZE.

"I don't want to stop organizing because of this treatment at the hands of the proprietors. I believe that as we have organ-

MASS MEETING OF THE INTERSTATE RETAIL DRUGGISTS' LEAGUE.

A mass meeting of the retail druggists of New York and Brooklyn, which was advertised so extensively in advance both through the columns of the "American Druggist" and by the president of the Interstate Retail Druggists' League at the several sessions of the National Wholesale Druggists' Association in this city, took place in Mott Memorial Hall, Wednesday, October 3. The proceedings were opened by A. M. Rontey, who welcomed those present on behalf of the local branch of which he is the president. Prof. Luther F. Stevens was elected secretary pro tem, in the absence of the regular secretary, T. O. Morrison.

In a few brief and deftly turned words, Mr. Rontey introduced Henry Canning, and when the cheering which the mention of his name evoked, had subsided, he formally requested Mr. Canning to preside over the meeting.

Mr. Canning, who was received with renewed cheers on advancing to the platform, thanked those present for the response which they had made to his invitation to come together and discuss League matters. He said:

75 PER CENT. HAVE SIGNED.

"I wish to thank the gentlemen of New York and of Brooklyn who have given their services to the League. By their aid we have succeeded in procuring the signatures of 75 per cent. of the druggists in both cities, and this is sufficient to encourage us to greater efforts.

"The League started in the West in St. Louis, three years ago, and I hope that the motto of the National Wholesale Druggists' Association, 'They builded better than they knew,' may some day be applicable to the retailers of St. Louis. The honor of having founded the League is due to Thomas F. Layton of St. Louis, who was its first president."

THE CONSTITUTION OF THE LEAGUE.

Mr. Canning then explained the governing principles of the League and said it was similar in construction to the plans of the National and State Governments. The city and county associations are represented in the State Executives and the latter compose the Executive Committee. By this system of delegates a proper representation is secured and the National Conventions represent the voice of the whole League.

WHEN 80 PER CENT. IS SECURED.

"Now," he continued, "what does this League propose to do, and how will they accomplish their object? We have proceeded to organize the League to represent eighty per cent. of the entire drug trade of the country. When eighty per

cent. is secured that number will be allowed to establish their own schedule of prices.

"One part of the plan was that proprietors should only distribute their goods through a prescribed channel; but we must have organization before we can get anything."

THE CURE FOR CUTTING.

In a reference to the rebate plan Mr. Canning made a declaration which evoked instant and prolonged applause. He said: "The goods must be distributed at uniform rates to the retailer regardless of quantity. This will place all on the same footing. If for a while the cutter succeeds in getting goods, he must purchase at the same rate as the retailer. Added to this and the main plank in our platform we declare:

We hereby agree to withdraw our patronage from any wholesale dealer or jobber who knowingly and willfully furnishes cutters with any merchandise whatsoever. We also agree to discontinue the sale of any patent medicine or proprietary article furnished to cutters by manufacturers or through their agents.

"Do you mean to tell me, gentlemen, with an organization of the trade throughout the country, that this would not be a sufficient club? I think it would!"

LEGITIMATE DRUGGISTS DO NOT SUBSTITUTE.

Speaking of the complaints made by proprietary medicine men regarding substitution by druggists, Mr. Canning gave it as his opinion that there is less substitution in the ranks of the legitimate drug trade than with cutters. He thought the proprietors knew this, and must also be aware of the fact as told to him by his canvassers, that certain drug cutters in the city (New York) paid a percentage to clerks who sold the store specialties in competition with standard articles. These specialties, he said, are supplied by non-secret men.

NEW YORK ORGANIZED.

"Now, gentlemen," continued Mr. Canning, "I have mapped out the plan of the League. Our recent work in this city has cost not a dollar to any individual outside of New England. The League has been organized in New York at its own expense. I have about come to the conclusion that the League, although born in the West, must be born again in the East. The dealers in the West attempted to put the screws on too early in the game. The League plan has never been fairly tried. We have been simply organizing. Chicago, St. Louis and Cincinnati had organized and adopted the League platform but were a little too hasty in putting it into effect. After a strong organization had been secured in these cities, the druggists became im-

ized the retailers of New England without expense to the League the same can be done here. No other deduction could be drawn from the treatment extended to me at this meeting than that the proprietors are indifferent to the wants of the retail druggists. At every convention where I have had the privilege of meeting the proprietors I have always treated them with the utmost courtesy and never demanded anything from them except in the most courteous tone; and it certainly was cold to say the least that the only representative of the only national association of retail druggists in this country should have been treated as I was. There are some proprietors in the room and if they desire to say anything to offset this I gladly extend to them the privilege of the floor.

THAT CONTRIBUTION OF \$200.

"Some one has said, and the report has received circulation, that a contribution of \$2,000 was made for the League at Montreal; but if such a contribution has been received it has certainly not come to my knowledge."

C. E. Dennin, of Brooklyn, next addressed the meeting. He was convinced, after listening to Mr. Canning, that the retail druggists of this city and vicinity could do nothing better than to proceed to organize; by so doing they could compel the manufacturers to come to terms. He said: "I have had some experience in Brooklyn in the matter of organizing the retail trade, and I certainly know that it is no easy matter to induce them to take definite action in concert, even when it is to their own interest and profit. If there is a manufacturer in the city of New York or of Brooklyn who will not protect the retail druggists of those cities, then I say he is no friend of the trade."

C. S. Erb said: "Some manufacturers are able to keep their goods out of the hands of the cutters. Why, then, cannot the remainder do the same?"

James Duggan, of Norwich, Conn., who had come on to New York for the special purpose of attending the meeting, gave a brief account of the progress of the League in Connecticut. In Hartford out of 81 druggists 77 had joined the League. In Middlesex every druggist was a member. All but three of the druggists of New Haven had joined. In Fairfield County every druggist had become a member with the exception of a few in Bridgeport. In New London they represent 80 per cent. and other counties made a similarly good showing. In opening up the campaign they had voted to spend \$200, but had been able so far to get along without any expense to speak of.

SUFFERANCE AND SODA WATER.

Mr. Duggan became facetious as he proceeded and made some witty remarks. "The way to resume" he said, "is to resume. The way to do this thing is to do it. As high an authority as Mr. Canning has advised putting up the prices to the full limit, and I am satisfied of this as I occasionally get a little tired of living on sufferance and soda water."

G. W. Cobb addressed the meeting briefly at this point, going over the construction of the New England Retail Druggists' Union, of which he is the president. This association is officered by the officers of the several local associations in New England. He did not see why the New York druggists could not take similar action and bring the officers of the different local organizations together.

F. G. Bonnell, who spoke of himself as a reformed outter expressed it as his belief that if the druggists of New York would

prove themselves in earnest in the matter by bringing about speedy organization the field was theirs. He paid a graceful tribute to the painstaking efforts which George J. Seabury had expended in the interests of the retailers and said those now in the movement were certain of success, providing they continued in the work begun.

A PROPRIETOR SPEAKS.

H. M. Sharp of the firm of Dr. D. Jayne & Son, Philadelphia, told of how he had labored with Mr. Canning in the interests of a movement similar to this, some ten or twelve years ago, and said, he could bear willing testimony to the fact that in all his intercourse he had found him ever the courteous gentleman. If, however, Mr. Canning was under the impression that he had been wounded in the house of his friends it was a mistaken one. Mr. Canning had got up in the meeting of the Proprietary Association toward the close of a long and dreary session, and under the circumstances it could readily be understood that the members were not in a position to give him the attention which he undoubtedly expected. As for the unexpected reply given to him with reference to the date on which the plan might be put into execution, he said, Mr. Canning had himself supplied the words "whole country." The gentleman who answered him did not use this expression. He hoped that Mr. Canning would accept his explanation. The house of Dr. D. Jayne & Son had expended much money for the purpose of bringing about organization among the retail trade and were ready to-day to go further in the same direction provided they could know they were not barking up the wrong tree.

WISHES THEM SUCCESS.

E. A. Bigelow of the J. C. Ayer Co., Lowell, Mass., said: "I don't believe there is an unkind feeling toward Mr. Canning in the breast of any member of the association. I live within twenty-five miles of him; I know him well and he knows me. I have listened to the declaration of the League platform and am impressed with its apparent efficacy. I wish you all success in your undertaking and am glad to hear that your canvassers have met with success."

President Canning again addressed the meeting in reference to his reception at the meeting of the Proprietors' Association. He did not wish his remarks regarding the proprietary meeting to be taken as personal references, and instanced his many friends among the members of the association. His statement regarding the words used by the member who replied to him during the meeting was correct, notwithstanding the remarks of the proprietors present, and in this he was supported by a number of members present.

GEO. J. SEABURY ON HIS STATUS.

George J. Seabury, on the invitation of the chair, then made a brief but telling address. "The chair needs to make no apology for me as to my status as an operating pharmacist," he said. "I cannot be classed among the manufacturers of proprietary medicines, as I am not a patent medicine man. My sympathies are with the pharmacists and the wish I would express is that you would only do half as much work for yourselves as I have done for you. The whole trouble is that the pharmacist of large communities has not the cohesiveness of a bricklayer."

THE JOBBER IS THE MAN TO LOOK OUT FOR.

Speaking for himself he said, "No one can buy any goods in my establishment

who is not a pharmacist. When I point my index finger you can take it as truth the man who has done more than any one else to kill the druggist is the jobber." In speaking of the relations between the retailer and the jobber he became quite bitter and it was plain to see that his own relations with them had not been of the pleasantest. Coming to organization, however, he had many pleasant things to say in his own forcible and telling way. "Organization is of paramount usefulness," he said, "but it takes a great revolution of public opinion or a charge of dynamite to work up the trade, I believe in getting right into my cavalry boots and charging on the enemy."

A PROFESSOR STARTLES THE MEETING.

Prof. Luther F. Stevens startled the members with the vigor and earnestness in which he set forth the needs of the hour. He said in part: "It has been my misfortune in the past to have been engaged in nearly every forlorn hope that was ever attempted. I wish to define the issue sharply: we are here to-night either for business or for failure. The success of your canvassers in Brooklyn and vicinity convinces me that their mission was admirably planned. With the aid of these two hustlers the signatures of over 80 per cent. of the pharmacists of Kings County had been secured. Those who refrain from coming forward during the present crisis are cowards and they know it."

Henry V. Meyers said: "One of the last speakers said he had intended to say very little, but I had intended to say nothing at all. If we could begin on 80 per cent. we would get along nicely. Mr. Seabury wanted to know where the cutters got their supply of Benson's plasters. If I manufactured an article I would make it a point to know where the goods were procured. I find it more profitable to get my supply of Benson's plasters from dry goods houses and I sell as many as two dozen a day."

MR. SEABURY OBJECTS TO FREE ADVERTISING.

Mr. Seabury arose to a point of privilege. "The previous speaker," he said, "has given my firm a great deal of free advertising, for which I am sorry, for we do not need it. It is not the manufacturer who is the sinner. The manufacturer is Dr. Jeykl and the jobber is Mr. Hyde."

"This is not the place for me to sound a new tocsin of war, but 'must the middle-man go?' I understand Mr. Meyers' position, but it is a reflection upon the retailers that they refuse to discriminate between friend and foe."

Mr. Meyers said he made the statement he did because Mr. Seabury did not seem to be aware of the fact that his plasters had been sold in dry goods houses. He paid a willing and grateful testimony to the assistance which Mr. Seabury had rendered to the retail trade to regulate prices and hoped his remarks would not be construed into a personal reflection.

A VOICE FROM ST. LOUIS.

Henry R. Strong of the *National Druggist*, St. Louis, then addressed the meeting and created a favorable impression by his very eloquent references to the city where the League had had its inception and the men who first guided its destinies. The St. Louis people are nothing if not enthusiastic, and if Mr. Strong made unusual flights of rhetoric he was perhaps justified by the circumstances. He said "I am proud to hail from that great city where the League was born and to have as my

friends those men in whose brains the plan had been engendered. I am profoundly gratified to see that the plan has grown in the great and mighty East. I tell you, sirs, we will follow you in this effort of yours to redeem the profession of pharmacy from a mere commercial pursuit. It is not a mere matter of percentage and I would advise you to take lessons from advertising men. When you have the 75 per cent. and want to get 25 per cent. you want to sit and watch your subjects and use every influence to bring them to your way of thinking. The error of the West was that it struck the blow before the arm was strong enough to make the right impression. When they understand in the West how well you are succeeding I can guarantee you their co-operation."

Mr. Canning said that if Mr. Strong would carry back to St. Louis the sentiments he had expressed at the meeting the League should gain renewed strength in that section. In the meantime he thought it would be well to carry on the work so well begun in the East. From this he passed on to the support which the League had received from the pharmaceutical press and said:

"I want to confess that the pharmaceutical press has not supported the League as it should have done:

THANKS FOR THE "AMERICAN DRUGGIST."

"We are certainly indebted to the efforts of one drug journal in this country. From the inception of the League to its present position that journal has been its consistent advocate and friend. That journal has been a great factor in bringing about this meeting. It made the canvassers' way clear. They could refer to the AMERICAN DRUGGIST. To the rest of the drug journals of the country I would say, 'Go thou and do likewise,' do what the AMERICAN DRUGGIST has done. Our work would have been easier if we had had their enmity instead of their lukewarmness. I read all the drug journals, and with only two exceptions, find that little support is given to the League. I cannot speak for the St. Louis drug journal, as I seldom read it, but I hope that the rest of the journals will take pattern after the AMERICAN DRUGGIST."

On motion of C. S. Erb the AMERICAN DRUGGIST was voted the thanks of the association for the warm interest it has taken in its affairs.

After listening to brief speeches from Messrs. Charles, Rontey and Keenan the meeting adjourned.

NEW MEMBERS.

The following accessions to membership were reported at this meeting:

Chas. Dennin, 1st Place and Court street, Brooklyn; Miller Bros., 708 Tenth avenue, N. Y.; Arthur Rilonette, 540 Columbus avenue; Alex. Gardner, 49 Myrtle avenue, Brooklyn; Fasset & Messaros, 132nd street and Lenox avenue; J. Lewin, 130 Rivington street; H. Schmidt & Co., 923 Third avenue; John K. Oats, 653 Ninth avenue; Dr. Greenbaum, 335 East Houston street.

THE REGULAR FORTNIGHTLY MEETING.

The regular fortnightly meeting of the New York City Branch was held October 5th. Mr. Canning was present and addressed the meeting urging the members to complete the organization in this City until 80 or even 100 per cent. of signatures have been obtained. The canvassers from the East succeeded in obtaining something over 200 signatures to the League petition. This in addition to the number already enrolled brings the roster up to 600 which the members consider very encouraging. Mr. Canning urged the branch to confer with

the jobbers and obtain their assistance in promoting the objects of the League and a committee was appointed for this purpose. The following resolutions adopted by the wholesalers at the convention held recently in this City were presented by Mr. Canning:

RESOLUTIONS.

Resolved,—That we pledge our support and co-operation to the retailers in their laudable efforts to organize under the Interstate Retail Druggists' League, and request our Proprietary Committee to give any aid in their power to increase and perfect the organizations formed by retailers for the regulation of the prices of proprietary articles,—and local exchanges are recommended to assist the Interstate Retail Druggists' League in organizing their various sections.

Resolved,—That we also repeat our conviction that as a measure of protection to retailers, and as a means of preventing cutters, either at wholesale or retail, from obtaining supplies of proprietary articles at a discount, no contract goods should be sold at full rebate discount to dealers who are not doing a legitimate jobbing drug business.

The next regular meeting of the Local branch will be held in their rooms No. 64

Madison Avenue on Friday October 19th at 8 o'clock.

The New York City papers are probably more distinctly local in their news columns than are the journals of any other great American city. One illustration of this localism is the comparatively little space accorded by them to meetings of national organizations held here. Of the morning papers only the *Times* and the *Tribune* gave any adequate account of the meeting of the N. W. D. A. The account in the *Times* was particularly full and well written. The *Tribune* illustrated its story of the proceedings with portraits of prominent members, many of which were most excellent from an artistic point of view and of these the portraits of Messrs. Peters, Humphrey, Eliel, McKesson, Scott, and Brooks have been used in illustrating our report of the meeting.



Hints to Managers.

The best manager is not the one that does the most work himself, but it is the one who has the capacity for getting the most work out of others. We find a great many business men who are so worried and so absorbed over the small details of their business, that they have no time to attend to or to look into the larger affairs which more properly belong to them.

The word manager itself does not mean a worker, but more properly means one who directs the work of others. The principal business that a manager should do should be to inquire into all the work and affairs of the employees in the house. Let each employee have a particular work to perform, and then let the manager's sole business be to see that the employee does the work in the right way.

Of course we know that the manager ought to be able to do all kinds of work himself, so that in case he is caught in a pinch he does not have to call upon others, but when there is no absolute necessity for his performing any of the minor duties of business, he can more profitably devote his time to overseeing.

TEACHING BY EXAMPLE.

We have seen a great many managers who are not particular enough in the example which they set employees. They think that owing to their position they can do a great many things which they would not tolerate in the clerk; but we must not forget that the clerks will watch what the managers do, and govern themselves, in a great many cases, by the liberties which he allows himself.

We know of some managers who are in the habit of appropriating to themselves small articles about the store which, although they may not be really very valuable, still are not their own property, and

are apt to impress loose ideas upon the salespeople. What right has a manager to prohibit salespeople from stealing or from lying, when the salespeople daily see him committing these sins? Clerks are very quick to criticize what their managers do, and are very quick to follow them in any evil practices which they may have. They are not near so quick to follow you in your good qualities as they are in the bad ones. It is therefore a very great point that every manager should set personally toward the clerks, and toward his employer, in a perfectly honest way.

There is one thing that a manager should insist that his clerks should not do; that is, that at no time shall there be any loud talking or fussing among them. If you cannot regulate the tempers of your employees so as to keep them at all times from controversy among themselves, or with the customers, it is well to dispense with their services.

THE CONTENTIOUS CLERK.

Some clerks are very contentious, and are always on the lookout for what they call a soft snap. When they see a customer come back into the store who has lately been in and was waited on by some one else, they think that now the person has returned to buy, and that they can get all the benefits of the sale without having first gone to the trouble of showing the goods. Such clerks as are in the habit of watching out for "come backs" and neglecting others, are not the good clerks which will be a benefit to your store.

Don't let your clerks stand in a bunch around the door. It is well to have them in sight behind their proper counters, but it is a very bad feature to allow them to congregate around the door, talking or looking out into the street. Some ladies

are very timid, even in buying, and feel a hesitancy in walking into a store where the eyes of a dozen or more clerks are fastened on them from the minute they enter the door. The salespeople should all be in a position where they can easily reach customers who may come in, and quickly wait upon them at whatever counter they may stop; but do not allow them to crowd around any particular point. You must keep order in the store at all events, and the only way in the world to have an orderly store or a store in which customers are served promptly is to have every clerk know his place and keep it.

EARLY AND LATE.

It is a good thing for a manager to be at the store early and stay late. There is an old farm saying which might well be used for a store as well, and that is, "The one who sees the white sparrow is sure of success."

It is an old fable about a farmer whose place was going to ruin and who, on consulting a friend, was told that there was but one hope for him, and that was to see the "white sparrow." His adviser also told him that the white sparrow was only to be seen very early in the morning.

The farmer, who was rather a superstitious person, at once began to get up early every morning, and look about his place trying to find this curious bird. The first morning he discovered that his milkmaid was in the habit of getting up very early and giving away to the neighbors, or selling for her own benefit, a bucket or two of fresh milk, just after she had milked the cows. The second morning he discovered something else that was done at his expense, and so on each morning he found out some point which needed correction. Finally, after a month or so, his farm began to improve, and he also began to find that he was saving many things which heretofore had been a loss to him. His friend then asked him if he had found the white sparrow, and he replied no, that it was not necessary to find the white sparrow now, as by getting up early he had found how to change the course of things, so that his farm was already in a satisfactory condition.

It is this way with every manager. If you come late and go home early, there are many things which will escape your attention that it would be very profitable for you to know.—Dry Goods Chronicle.

cleansed of a fourteen years' accumulation of dust and cobwebs, the wood work shines in the first coat of varnish it has received since the opening day, and the whole premises bear evidences of a revival of prosperity. Reeder Brothers are both graduates of the New York College of Pharmacy, and enjoy the confidence of the physicians of the neighborhood.

It is generally supposed that the woman druggist is altogether a development of the present day—the direct result of the scientific course of this end of the nineteenth century college. Nevertheless, it was the other end of the nineteenth century that saw Elizabeth Marshall of Philadelphia succeed her father, Charles Marshall, to a drug business established by her grandfather, Christopher Marshall, before the Revolution. And she made a success of it, too, as a clever woman will of anything if given a fair chance and a free foot. One of her apprentices was Charles Ellis, subsequently one of the founders of Philadelphia's College of Pharmacy and at one time its president.

The "American Grocer" has just issued a magnificent anniversary number, in celebration of its twenty-fifth birthday. For a quarter of a century the "Grocer" has fulfilled its mission of usefulness to the trade which it represents, and in this handsome memorial issue it gives evidence that its efforts in behalf of the trade have been most generously supported and rewarded. The anniversary issue is handsomely illustrated; is printed upon heavy calendered paper, and the cover in green and silver, is one of the finest specimens of the printer's art that it has been our privilege to see within a long time. Portraits of leading men, and illustrations of special industries without number are found within its pages. Taken altogether, it is a memorial worthy of the journal by which it is published, and of the trade of which the "Grocer" is the exponent.

Rather a peculiar construction of the law is being taken in a suit which has been begun in the City Court by Moritz Beram against Nicholas Kruskel. The latter keeps a drug store at Delancey and Allen streets. Early in the summer he made an arrangement with the plaintiff by which a soda water stand should be conducted outside of his premises. For this Kruskel was to receive a monthly rent. Beram paid the amount promptly for several months and then a disagreement arose between the two men, the result of which was that Beram was told to vacate. He did so, and went to Lawyer E. I. Yuells to see what could be done in the matter. The lawyer presumably advised him to sue for the return of the money he had paid Kruskel for rent during the summer on the ground that he had occupied the sidewalk in violation of a city ordinance. M. H. Grossman, of Friend & House, who is acting as Kruskel's counsel, holds that the law does not permit the recovery of money paid out through an unlawful contract. While Beram could have successfully resisted the payment of the money given as rent before it was paid, he cannot sue for the recovery of it afterward.

Dr. Wm. Jay Schieffelin, the junior member of the firm of W. H. Schieffelin & Co., is the subject of the following sketch in the *New York Commercial Advertiser* in connection with the recent meeting of the N. W. D. A.:

Among the New Yorkers present at the sessions the tall, slender figure and youthful face of Dr. William Jay Schieffelin attracts the attention of the casual visitor. Dr. Schieffelin is a prominent figure in New



NEW YORK.

Dr. Mattison, of the firm of Keasby & Mattison, Ambler, Pa., sailed for Europe, October 6.

L. Werner has bought the pharmacy at 95th Street and Third Avenue, formerly conducted by G. W. Bechtold.

Tom Peek and wife, of Macon, Ga., are in the city. Mr. Peek is buyer for the firm of Henry J. Lamar & Co., of that city.

Percy C. Magnus has just returned from a business tour through New England and reports business in that section as in a very satisfactory condition.

Henry Allen, the popular manufacturer of glassware, is an active member of the Committee of Seventy who are conducting the city reform campaign.

W. J. Baker, senior member of the firm of Baker & Co., glass manufacturers, of Baltimore, Md., died at his residence, on Sunday, the 23d ult., of apoplexy.

Mrs. Harriet Hubbard Ayer has entirely recovered her health and has taken active charge of the affairs of the Recamier Mfg. Co., which she is administering with all her wonted vigor and originality.

Baltzly's pharmacy at One Hundred and Thirty-fourth street and Seventh avenue was damaged by fire on September 28d to the extent of \$3,000. Mr. Baltzly and his family had a very narrow escape.

F. N. L'Estrange has sold out his interest in the Park Pharmacy on Depot square, Rutherford, to his partner, Frank

E Hatch, and will probably soon engage in business elsewhere on his own account.

F. B. Campbell of 241 Hoyt street, Brooklyn, has decided to abandon a pharmaceutical career and take up medicine. He has sold his pharmacy to A. Swiedler, who formerly owned a store on Eighth avenue.

Prof. Henry W. Schimpf is at work on the final revision of his new "Text-book of Volumetric Analysis," which will be used by the students of his inorganic chemistry classes, of the Brooklyn College of Pharmacy. Those who have seen the MSS. of the new work speak in praise of its useful character and anticipate a large demand for it from pharmaceutical students. It will be published by Wiley & Sons, of this city.

D. F. O'Connell, formerly at 82½ Broadway, opposite Old Trinity Church, has removed his handsome store to 508 Court, corner Nelson street, Brooklyn, where he expects to do a more lucrative business. His reputation in Brooklyn need not be established, as Mr. O'Connell conducted a store in the City of Churches some years ago and is well and favorably known in the community. Mr. O'Connell will spare no time or expense to make his store one of the most complete in Brooklyn and all his numerous friends wish him success.

The pharmacy at Thirty-first Street and Fourth Avenue, formerly conducted by Theodore Angels, has taken on a new appearance since Reeder Brothers assumed proprietorship. The walls have been

York society, his marriage with Miss Louise Shepard, a daughter of the late Colonel Elliott F. Shepard, and granddaughter to Mr. Vanderbilt, which occurred a year or two ago, having been one of the great social events of that season. Unlike many young men, born to the purple, Dr. Scheiffelin is an enthusiastic scientist, being a graduate of the University of Gottingen, and an active business man, devoting all his time to the affairs of his firm, which has but recently celebrated the centennial of its business career.

Harry Savage, who has long held the position of Apothecary at the Outpatient Department of Bellevue Hospital, died on the 4th inst. after a brief illness.

Alfred Hy. Mason of Seabury & Johnson, celebrated with Mrs. Mason on Sunday last the silver jubilee of their wedding.

THE OPENING OF THE COLLEGE.

On Monday, October 1st, the halls of the new College of Pharmacy were thrown open to the new classes for the first full course of lectures. A few lectures were delivered in the new building toward the close of the last season, though the building was then in an unfinished condition so far as some of the interior work was concerned. In fact, the workmen are still engaged in putting on the finishing touches to the interior of the building, and for this reason no formal "opening" of the college has been held, this being postponed until every detail has been adjusted to the complete satisfaction of the committee.

There were therefore no formalities at the opening lecture of any kind. The students were assembled in the main lecture hall, which is a large, airy and well lighted amphitheatre and the opening lecture was delivered to the senior students by Prof. Rusby on *materia medica*.

The first section of the senior class was then inducted into the mysteries of the halogens in the pharmaceutical laboratory by Virgil Coblentz. Each student standing at his desk carried out the tests described and performed by the professor simultaneously, while two assistants in a uniform of neat and serviceable brown and white overalls moved about from point to point giving suggestions, advice or cautions to individual students.

Dr. Rusby in the meanwhile took another section of the senior class through a practical demonstration in pharmacognosy in the room devoted to that purpose, while still another section under Dr. Elliott was busy in the chemical laboratory.

Clerk Griffin occupied a veritable "Tom Tiddler's ground" in his sanctum on the opening day of the College. An unprecedentedly large number of students matriculated on this day and the proceeds in the way of fees made a large and imposing pile of bills, gold and silver, which Mr. Griffin was sorting out into rolls of different sizes when the "American Druggist" man looked in upon him.

A number of the "Honor men" of last year's class are forsaking pharmacy for medicine and the example set by Herman Graesser, the President of the Alumni Association, is perhaps the responsible factor. Mr. Graesser matriculated at the College of Physicians and Surgeons in September last and will have as his class-mates Henry Kreuder and J. Henry Wurthmann.

THE BOWLING CLUB.

A meeting of the Wholesale Drug Trade

Bowling Association was held at the office of Seabury & Johnson, on Thursday, October 4. The following officers were elected for the season of 1894 and '95: President, G. S. Mariager, Parke, Davis & Co.; secretary, H. O. Barnes, Colgate & Co.; treasurer, L. W. De Zeller, Seabury & Johnson.

The Committee on Alleys reported the result of their calls at several places, and, on motion, it was decided to secure the Tremont Alleys, situated on Broadway, opposite Bond street. The games are to be called at 8 o'clock—sharp, on Saturday afternoons. The tournament opens October 20.

It was the unanimous wish of all present to hold open the entries until the next meeting, which will be held on Thursday, Octo-

ber 11, at 5:30 P. M., at the office of Parke, Davis & Co.

The following concerns' propositions for membership were received: Lanman & Kemp, Bruen, Ritchie & Co., and R. W. Robinson & Son.

The teams composing the League up to date, are as follows: Lanman & Kemp, Bruen, Ritchie & Co., R. W. Robinson & Son, Colgate & Co., Merck & Co., Seabury & Johnson, G. C. Bacon & Co., Whitall, Tatum & Co., Dodge & Olcott, and Parke, Davis & Co.

Immediately after the next meeting the Schedule Committee will get to work and arrange for the team work during the season.



Charles Roome Parmele.

Charles Roome Parmele is so well known to the pharmacists and physicians of this country by name and reputation, that a portrait sketch in the columns of this journal is sure to be appreciated by his many friends both in and out of the two professions. Added interest is given to this in view of the recent formation of the Charles Roome Parmele Company, for the manufacture of new medicinal combinations of gold bromine and mercury, preparations which have already met with unparalleled success, and are now very generally employed by physicians in the alleviation and care of specific ailments.

Charles Roome Parmele is a New Yorker of the New Yorkers, having been born and educated within the city limits. His early boyhood days were spent in the capital of South Carolina, where he seems to have imbibed some of the fiery, nervous energy which is so prominent a characteristic of the descendants of the French Huguenots.

Mr. Parmele was introduced to the profession of the United States some years ago as a representative of the California Vintage Company, the headquarters of which were in the city of New York. By his personal powers and rare tact, it was not long until he made the word "Calvico," as representing his company, thoroughly familiar to the profession. For a time later he was engaged in the field of Medical Journal Advertising; subsequently he presented to the profession "Papoid," being the chief promoter of the same. Papoid with Parmele's promptness like a sky rocket was soon blazing brilliantly before the eyes and in the minds of the entire medical guild of the Union.

The latest and most marked success that has attended Mr. Parmele's efforts in a commercial way has been his connection with the gold preparations known as "Arsenauro," "Mercauro," etc.

We have reason to expect a continued successful career for Mr. Parmele, for he has proven to us that he is built in a manner to merit a sustained success, and this is the strong point in the man as it is the strong point in any man. He has made a most remarkable career as a business man. The genial, gentle, sentimental, artistic, poetical and musical qualities possessed by Mr. Parmele often interfere with a material success and he who is strong enough to be thoroughly business in spite of such possessions must need be strong. Mr. Parmele has a future before him that is indeed bright.

MASSACHUSETTS.

Boston, October 5.—Before going to New York President Cobb of the N. E. R. D. U., and Secretary Reeves of the Guild went to Maine on an organization trip where they accomplished much for the League. Their first stop was at Portland where they consulted with Vice-president Hazeltine. Then they continued on to Lewiston and from there to Brunswick, Augusta, Gardiner, Halliowell, Waterville and Bangor. Several meetings were held and many individual signers were secured and several canvassers for the Union were appointed. These are already at work and are visiting the druggists in surrounding towns in the interest of the League. Secretary Reeves also visited Salem and Lynn druggists and although the time at his disposal was limited, he seemed much gratified with the result of his trip. He reports that Salem druggists were especially pleased with the League plan and favorably anticipate its early adoption. Pressure for time prevented calling on all of the Lynn druggists, but those seen were in accord with their Salem brethren.

President Cobb, of the Union, is enthusiastic over the good work of Secretary Reeves in Vermont, and believes the genial secretary could organize the whole country in six months. He strongly advocates the organization in other States upon similar lines, claiming that what was done in Vermont can be duplicated in every State; he stipulates the right kind of men and money as necessary essentials, though. He claims that twenty-five good men could organize the country in thirty days and that it should be done at once or the business will not be worth running. President Cobb is rightly of the opinion that the organization will be beneficial to the trade, plan or no plan. He has always considered money a potent factor in work of this kind—a means to accomplish an end. A contribution of ten dollars from each retailer or a fund of ten to twenty thousand dollars would be a formidable element of strength, and he is of the opinion that a few dollars invested by each druggist in this way would not only be of present but of lasting benefit.

The Androscoggin County Pharmaceutical Association, (Maine), is awake to the benefit of local organization. A schedule of prices has been adopted and a price list published. The officers of this association are as follows: President, W. A. Robinson; vice-presidents, S. D. Wakefield and S. B. Smith; secretary and treasurer, D. P. Moulton; executive committee, W. E. Ricker, B. L. Alden and C. A. Abbott.

NEW QUARTERS OF THE BOARD OF PHARMACY.

Now that the Board of Pharmacy is installed in its new quarters at the State House, active preparations are being made to suppress the illegal sale of the ardent. The law passed by the last general court plays an important part in this undertaking. This means, in brief, that if the board finds a law-violating druggist, it not only refuses him a sixth-class license, but takes away his certificate, thus preventing him from doing a legitimate drug business.

Investigation along certain lines sharper and clearer than any yet made has brought to light and to the attention of the courts not a few, but many facts, the board thus being enabled to exercise the judicial power placed in its hands.

BOARD PROSECUTIONS.

The hearing of a few days ago was by no means exceptional, but a brief account of what took place will give some idea of the course which the board is pursuing. The board was called to order at 9 a. m. Ten applicants for liquor licenses were disposed of. Two applications were granted, two refused and six laid over for investigation. At 10 o'clock the case of the board of registration in pharmacy vs. — of the city of — came up for discussion. The chief of police of the city in question and the defendant were duly sworn. After the chief officer had finished his direct testimony the defendant was given opportunity to ask any question in cross-examination, or to plead any excuse. He was then requested to retire to an adjoining room. The testimony was reviewed by the board. Then came the vote by which the defendant's certificate of registration in pharmacy was revoked.

The defendant was told the judgment of the board, and in this case, which was quite unusual, the deposed pharmacist proposed to return his certificate, which was gracefully accepted. So-called druggists who have liquor cases pending in court cannot be in a very happy frame of mind. Conviction means not only to suffer the penalties imposed by the court, but to run the gauntlet of the board of pharmacy, whose members are awaiting the result of the jury trial in the several appealed cases.

THE NATIONAL PAINT, OIL AND VARNISH ASSOCIATION.

The annual convention of the National Paint, Oil and Varnish Association will be held in Boston on the 9th, 10th and 11th of the present month.

There will be delegates from New York, Philadelphia, New Orleans, Pittsburg, Cleveland, Kansas City, Omaha, Chicago, St. Louis, Detroit and other cities. The basis of representation is one delegate to every 25 members in each club. Each city has its club.

The Paint and Oil Club of New England may properly be called the parent organization. It now has 130 members, Providence, Worcester and other large New England cities being represented, and Boston giving about one-half the total membership. Soon after the New England wholesalers formed their association New York followed the example. Then Chicago followed and it was not long before all the large cities had organizations. As these flourished and were successful in their aims, there seemed to be a general desire to bring all the interests together in a national association. This was consummated about seven years ago—the coming convention will be the seventh annual. The first meeting was held at Cleveland, the next at Detroit, the next at Cincinnati, then St. Louis, then New York, last year at Pittsburg, and now it is Boston's turn.

NEWS NOTES.

Frank Berridge succeeds W. F. Craig & Co., at Lynn.

J. B. Morin & Co., Bliddeford, Me., are about to open a new store.

D. W. Brintnall has opened a new store at 2986 Washington street.

Samuel E. Gross, of Johnson, R. I., has placed a Tufts fountain in his store.

Hon. E. A. Bessom, of Lynn, has received a renomination for the senate, which is equivalent to an election in his district.

The Dolliber-Goodale Co. is at present doing some original and effective advertising.

F. B. Murphy has opened a new store at Lawrence; his fountain is of the Tufts pattern.

Wm. A. Ferguson, head clerk at Percival's, is enjoying a well-earned vacation at Foxboro.

R. K. Gordon has moved his store from 50 Warren street to the corner of Eustis and Dearborn streets.

A. H. Foster, Gloucester, recently purchased Foster's drug store, in which he has placed a Low Art Tile fountain.

W. E. McEnerny, Derby, Conn., is the proprietor of a new store. His fixtures were the handiwork of C. H. Bangs.

It is rumored that several Nantucket druggists will soon be tried in the superior court for violating the liquor law.

Taylor L. Mills, of the City Hall drug store, has just returned from his vacation which was spent at North Bridgeton, Me.

B. O. & G. C. Wilson's store, Merchant's Row, was burglarized on the 3d inst.; \$5 was stolen from the cash drawer.

C. H. Bangs furnished the fixtures and James W. Tufts the fountain for the new store of Edward T. Brown & Co., at Ipswich.

Wholesalers J. A. Gilman, F. L. Carter, C. C. Goodwin, C. A. West and E. W. Cutler were in attendance at the convention of the N. W. D. A.

President Canning, of the League, has made several trips to New York recently in the interest of the organization which he so ably represents.

H. L. Swindell, Manton avenue, Providence, R. I., is moving his business to a new building and refitting, which includes a new Low Art Tile fountain.

Hon. Gorham D. Gilman has just returned to Boston after a seven weeks' sojourn in Hawaii, where he made a thorough study of the political situation.

My last letter conveyed the idea that Vermont had over 600 druggists. This was an error, the number of the craft in that State being very much less than the above figure.

Alphonse Belle Isle, a druggist on Franklin street, Lawrence, was charged in the police court recently with keeping a liquor nuisance. He pleaded guilty, and paid a fine of \$100.

A. W. Fenner, Jr., Providence, R. I., has opened a branch establishment at 129 Atwell's avenue. Hot and cold fountains of the Low Art Tile pattern occupy a prominent position in the store.

C. J. Eldridge, formerly with Gillam's Sons Co., and the Philadelphia Novelty Co., has accepted a position with the Low Art Tile Co., and will represent that concern in eastern New England.

F. L. Lathrop is now the proprietor of two stores at Providence, R. I., having recently acquired the "Poor Man's Apothecary," by purchase. For the latter store he has ordered a fountain from the Low Art Tile Co.

John Huggins, employed as a clerk by James S. Dudley, at the corner of Park square and Boylston street, has been arrested on the charge of stealing property valued at \$53 from his employer. It is said that the larceny took place the night before the arrest; a portion of the property has been recovered. Huggins is 35 years old and lives at 3 Melrose street.

Albert W. Fenner and the City Pharmacy, both of Providence, R. I., L. P. Hubbard, Plymouth, Mass., and Charles Clarke & Son, Lawrence, Mass., are recent purchasers of hot fountains from the Low Art Tile Co.

Hall & Lyon, proprietors of two stores at Providence, R. I., and one of the largest retailing firms in New England, have increased their business in that city by the purchase of a third store, that of Alfred Bath, on Broadway.

Last August the board of health examined 21 samples of drugs and found 5 of that number to be of poor quality. The adulterated samples were tincture of iodine, white wine, unfermented grape juice and essence of lemon.

C. H. Bangs has removed to 406 Washington street. Callers at his new office will find it admirably adapted to the wants of the trade. The location is central and the office has many conveniences all of which is conducive to Mr. Bangs' rapidly increasing business.

The Low Art Tile Co. has increased its force of traveling salesmen in the West. George S. Robertson, formerly with Humphrey's Homeopathic Co., and A. A. Warren (for a long time Low's eastern representative), will, in the future, look after the interests of this concern in that territory.

The board of registration in pharmacy closed its first meeting for examinations in its new rooms in the State House recently. The weeding out was generously done. Of thirty-two candidates examined only the following five were successful: Hermengeld Bourbonnais, of Somerville, Lewis M. Hudson, of Marlboro, Walter Hamilton, of Holyoke, Joseph Burkin Shaw, of Lowell, Frederick O. P. Lindborn, of Worcester.

The drug clerks of the Charlestown district organized recently. The objects of the association at present will be purely social, but it is very likely that it will also be protective in the near future. Officers were elected as follows: Dexter A. Richards, president; B. F. L. Humphreys, vice president; P. J. McCormick, treasurer; James M. O'Brien, secretary. The association will give a number of social events during the winter, beginning with a ball in Roughton Hall on the night of Nov. 6.

Frank Spencer, of Providence, R. I., knows how to defend his store as well as does the New Yorker who had recourse to the ammonia bottle. On the night of Sept. 24, a man crazed by drink entered Spencer's store, 347 Manton avenue, and without any provocation drew a revolver and endeavored to shoot the proprietor. The druggist was too quick for him, however, for he reached over the counter and knocked him out with a hammer. The man was so badly used up that the wound on his head had to be closed with stitches. This sobered him, and he was allowed to drive home.

PENNSYLVANIA.

PHILADELPHIA, Oct. 5.—Owing to the meeting of the National Wholesale Druggists' Association which was held in New York last week there is very little news in this city. Of course the retail druggists are pursuing their hum-drum ways, but outside of a better demand for cough mixtures there is very little that is new here.

MIGRATED TO NEW YORK.

The wholesale houses had their best men at the meeting in New York, and as this

letter is made up several days before the issue is sent out there was not much chance of securing any information from the absentees. Of course business is not at a standstill, but the new members are away. The wholesale business is showing a slight improvement but whether it has come to stay cannot be stated at this time. There is no doubt but that the wholesale and also the retail druggists are anxious for better times. They are in a position to welcome such a change and right gladly too at that. Since early last year the drug trade in this city has not been what it should be. The buyers pursued a hand to hand policy, which caused considerable inconvenience. There is, however, a better outlook, and the stores are beginning to assume an old time look, such as was experienced prior to 1893.

DEATH OF FREDERICK BROWN.

Since the last issue of the DRUGGIST the druggists of Philadelphia have lost a long-cherished friend in the death of Frederick Brown. He was a man who was well thought of, not only in his own business, but in religious circles as well. While not one to push himself into society he was well known, as besides having made a reputation in his own business he was president of the Laurel Hill Cemetery Company, a corporation of which his father was one of the founders. Mr. Brown was not an old man, he being only fifty-seven years old. He was born in this city, and after attending a private school for some time he was sent to the Episcopal Academy, where he secured his education. Later in life he entered the Philadelphia College of Pharmacy, from which he graduated. After he had secured his diploma he entered the drug store of his father at Fifth and Chestnut streets. Shortly after leaving college he opened a drug store at the Southeast corner of Ninth and Chestnut streets, which he gave up after having it two years. He returned to his father's store. At the death of Mr. Brown, Sr., in 1864, Frederick secured the store, which he controlled until 1890, when he sold it to Charles G. Dodson, who practically had conducted it since 1864. Mr. Brown sold out the store so that he could devote his time to the manufacture of the essence of Jamaica ginger. He was married in June, 1865, to Miss Wells, of New Haven, Conn.; she survives him, as also do three sons and one daughter. He died at his country seat at Burlington, N. J., after a few days' illness of pneumonia. He was a vestryman of St. Andrew's Episcopal church.

COLLEGE OF PHARMACY NOTES.

The seventy-fourth annual term of the Philadelphia College of Pharmacy began on the evening of October 1, and seven hundred and fifty students are now in harness for knowledge, and — the degree, coveted above all things by so many. It has been customary for years past to announce at the opening of a term that the college has the largest class on record, and to-day it is more true than ever. Would it not be a source of pride to the dead—to Parrish, Procter, Bridges, and others—to see how wisely they builded and taught when the college had its real foundation as an educational institution laid?

But while the college is called upon to accommodate such an army of invaders, never was she so well-equipped from every point of view, as now. The improvements in the handsome new buildings have reached the fullness of their usefulness. The advent of the three-year course finds the faculty a tower of strength, finely balanced in capacities to impart both theoretical and practical information. The three laboratories of chemistry, pharmacy and micro-

scopy are in swing to round out the college training in a way that makes the courses particularly valuable.

The number of women students who want to be pharmacists is the largest on record. It is probable that juniors and seniors together may include a full score of females. Whatever else may confront a woman seeking a degree, she cannot complain of lack of chivalrous conduct on the part of the men who outnumber her forty to one.

No time was lost on Monday night when the term began. Prof. Joseph P. Remington, dean of the college, spoke to the seniors in a general way for a few minutes, but soon settled down to his first lecture on pharmacy. Professor Sadtler followed in the next hour on chemistry. The juniors were introduced to work in the same way. On Tuesday Professor Trimble greeted the students in the chemical laboratory, and the microscopical laboratory, new to most of them, was eagerly visited. In the first two days Professor Bastin and his assistants enrolled the names of over 150 who will learn how to handle a microscope, and it is safe to say that this number will probably be doubled in another month. The trustees voted ample funds for the purchase of a larger supply of improved microscopes, and there will be no crowding or inconvenience on account of lack of "machinery."

At the meeting of the board of trustees of the college, Messrs. Edward C. Jones, Dr. C. A. Weidemann and William E. Krewson were re-elected members.

Secretary Krewson of the Alumni Association is one of the busiest men around the college. He comes in touch with the students frequently, and is always ready to help them in their work, which is also true of all members of the association who are active in the college's support. The alumni Committee on Zeta Phi, consisting of Dr. A. W. Miller, Dr. C. B. Lowe, Dr. J. L. D. Morrison, Prof. Moerk, Prof. Ryan and Mr. William E. Krewson, formed the preliminary organization of the senior class society on last Friday night, and the contest for class officers will soon be a lively one. The honors are worth having.

WOOD-MARIS WEDDING.

George Y. Wood, a well-known druggist who conducts the store at 10th and Spruce streets, was married on September 26th to Miss Mary Eleanor Maris, daughter of Edwin Maris, by the Friends ceremony. The ushers were Theodore Maris, Samuel Kirk, Arthur Wisler, Arthur Kingwood, Alfred W. Wood, and Harry Kirk. The bridesmaids were Catharine H. Wood, Toronto; Mary M. Garrett, Laura Shee and Dorothy Maris, who was the flower girl. After the ceremony a reception was held at the residence of the bride's parents, 1106 Pine street. Among those present were: S. Louisa Maris, Mary Louisa Maris, Susan Maris, William Maris and wife, George S. Garrett and wife, Mary Wood, Rebecca G. Wood, Stephen Post, Mary M. Post, Rachel P. Leys, Kate D. West, Elias H. West and wife, Joel Cadbury and wife, Walter H. Griscom and wife, Thomas Scattergood, Anna Scattergood, John H. Dillingham and wife, Annabella E. Wynn, Ephraim Smith and wife, George J. Scattergood and wife, Mary Ann C. Scattergood, Dr. Joseph Scattergood, J. Henry Bartlett and wife, Dr. Amy S. Barton, Alfred E. Maris and wife, Robert W. Maris and wife, Ernest Wood, Anna Spencer, Edward J. Garrett, Frank Wood and wife, Stephen Wood and wife, Dr. Thornton and wife, Dr. Harold Hewish, Annie Maris and daughter, Debby C. Pusey, Russell E. Harley and wife, Carroll B. Nichols, Alice Grantham, Helen West, Minnie Wood, Catharine Wood.

THE APOTHECARIES' UNION.

A meeting of the Apothecaries' Union, Limited, was held on October 8, for the election of secretary, treasury and board of directors. Outside of the election there was not much done. The report of the business for the year to date was very good, as it shows an improvement over that of last year. The election resulted as follows: Secretary, A. T. Pollard, M. D.; Treasurer, Robert C. Brodie; Board of Directors, James Buckman, W. M. Stern, Rush P. Marshall, James T. White, Wm. McIntyre, Wm. H. Lacey and David H. Ross. As the present charter of this Union expires with this month a new one is to be secured which will have a larger scope, as instead of just catering to the city trade, the whole State as well as the adjoining one are to be embraced.

NEWS NOTES, ETC.

Charles Lauder of Lanesdowne, Delaware County, Pa., has returned to the Jefferson Medical College.

The sale of Dr. Thomas G. Brown's Ridge avenue pharmacy to Mr. Thomas A. Walker, is reported.

James McCracken, head clerk in H. Cloud's pharmacy at Darby, has returned from his vacation greatly benefited from his rest.

Miss Emma Courtney, of this city, was married on September 26 to Mr. Silas O. Putnam, class of '92, P. C. P., and the couple will reside in Leavenworth, Kas.

David F. Swisher has moved from his former store at Ninth and Main streets, Darby, Pa., to his handsome new place of business at Sixth and Main streets.

George Connor, the popular Chestnut street druggist, is keeping his customers busy guessing what new novelty he will spring on them from day to day.

George W. Burke, who has been ill for some time with a severe attack of neuralgia, is able to be out among his friends again, for which both he and his friends are duly grateful.

Mr. S. A. D. Sheppard, of Boston, who is known to the wholesale and retail trade all over the United States, paid a visit to the college last week and was highly pleased with what he saw in the various departments.

Mr. Mahlon N. Kline, of the Smith, Kline & French Company, has been elected first vice-president of the N. W. D. A. In the matter of solving knotty trade problems and circumventing the schemes of cutters, he has fought in the van for many years.

Mr. Edward M. Boring, who has the leading pharmacy of the section of which Tenth street and Fairmount avenue is a center, is one of the men in the retail trade who appreciate the healthfulness of bicycle riding. He can be seen at times making flying trips to his wholesale dealer's place of business on his wheel, and he enjoys the exercise greatly.

Long & Neeley, the enterprising young druggists who recently bought out Mr. Genvis, who kept the drug store at Twelfth and Chestnut streets, have greatly improved their store. They have made it attractive, and the consequence is that their business shows a decided improvement. Since the theater season has opened they do a thriving business between the acts, as the patrons of the Chestnut Theater seem to be a thirsty lot.

Commencing on the evening of October 8, the merchants and other business men along Frankford avenue have been celebrating, and as there are a number of drug stores on this avenue the druggists have not been

behind their neighbors in decorating their stores. The street was ablaze with electric light and the many hued colored lanterns lent a fairy-land aspect to the scene. Besides this there was a parade which drew a large crowd and as the night was warm the merry sizz of the soda-water fountain in the various drug stores could be detected among the blowing of horns and the music of the bands.

The following druggists have determined to close their stores on Saturdays throughout the year at 8 P. M. Robert Shoemaker & Co., Smith, Kline & French Co., V. H. Smith & Co., Aschenbach & Miller, Robert Barker & Co., George D. Wetherill & Co., Lapp Drug Co. of Philadelphia, Shoemaker & Busch, William R. Warner & Co., John M. Maris & Co., Turner & Wayne, Robert A. Hance, Elma Confection Co., Limited; Walter F. Ware and the Charles E. Hires Co. Besides the above a number of others have been closing their works early on Saturday afternoon for some time past. It is thought, however, that all the wholesale dealers and manufacturers will soon give their employees a few hours off each Saturday, as it will pay them to fall into line with the above firms.

OHIO.

CINCINNATI, October 5.—The druggists in this city and vicinity are very much worried over the crusade to be made against the craft by the Food and Dairy Commission. The principal articles of merchandise which the officers of the commission have been gathering for analysis are baby foods and kindred products. Paakola, the proprietary remedy for making lean people fat, and vin mariani or wine of coca are among the products now in the hands of Professor Charles T. P. Fennell, the well-known chemist of this city, for analysis.

PROPRIETARY GOODS.

Other articles of merchandise retailed in drug stores are to be confiscated in the next few days and arrests by the wholesale will follow. All the leading down town druggists are apprehensive over the matter.

A leading medical journal published in this city prints the analysis of Paakola as made by Dr. Eccles, the Brooklyn chemist, which was published some months since in these columns, and if the analysis of Professor Fennell tallies with that of his professional brother in the City of Churches there will be some fur flying in these diggings. The law specifies that the party in whose possession the impure or adulterated goods are found shall be liable for prosecution, and it can thus be seen that the Queen City pill rollers have good cause for being apprehensive. What the result will be in the analysis of wine of coca known to the trade as vin mariani will be, is purely a matter of conjecture.

NEWS NOTES, ETC.

Soda water has gone and bouillon has come.

The local druggists report business as on the boom.

There is said to be a scarcity of sponges in this market.

Robert Woodke has left the employ of John C. Otis & Co. and is now working in Cumminsville.

Al. Boehmer, the popular pharmacist at Eighth and Central avenue, has enlarged his cigar department.

George Kylius, the progressive pharmacist at Liberty and Denman streets, is going to spring a new toilet preparation soon.

Louis Heister, the well-known druggist at Seventh and Elm streets, has beautified his store by encasing his telephone in a neat box.

Louis Sauer, the affable pharmacist at Central Avenue and Baymiller, wants a brand splinter new sewer constructed in the rear of his store.

Will S. Wagner, the handsome young druggist at Seventh and Vine streets, is disconsolate since Andy Bain left his employ to go to the hospital.

The funeral of John D. Park, whose death was mentioned in the last issue of this journal, was held in Covington. The remains were interred in Highland Cemetery after services at the Union M. E. Church. The floral tributes were numerous and handsome.

William Klayer, the druggist at Central avenue and Clinton street, has sold his place of business to John B. Rasther, who was formerly clerk for Druggist Koenig, on Harrison avenue. The store is to be fitted up in grand style. Klayer is going to study medicine.

Johnny Bauer, the popular pharmacist at Sycamore and Milton streets, has fitted up a room in the rear of his place for a laboratory and store-room. Johnny has a number of specialties which he sells to distillers and which bring him in a nice income from the outside.

Ed Voss, the druggist at 12th and Vine streets, and his clever clerk, Harry Streit-horst, have been practising with the boxing gloves, and they both think now that they missed their calling and that they should have entered the broad field of pugilism. Voss is a regular John L.

Ex-Coroner Bange has purchased the Steinicke pharmacy on upper Vine street. The doctor will remove his office from Fairmount to the second floor of the building in which his pharmacy is located. Martin Stoll, a well-known druggist, has been installed as manager of the store.

The paper read before the A. P. A. at Asheville, N. C., by Professor Charles T. P. Fennell, on "Oil of Cloves," was a masterly document and showed the clever chemist to be a profound thinker and a scholarly man. The paper is to be published in a local pharmaceutical journal.

C. J. Lammert, the pharmacist at Park avenue and McMillan street, has sold his store to Herman H. Koehnken of Fourth and Mill streets. The purchase price was \$14,000. Mr. Lammert will go into the wholesale tobacco business. Brother Koehnken now has one of the best stores on Walnut Hills.

Andrew W. Bain, the clever secretary of the Cincinnati College of Pharmacy, has been elected to the position of apothecary and storekeeper at the City Hospital recently made vacant by the resignation of Joseph Hall. "Andy" was the druggist at this institution for ten years and is in every way qualified for the place. He has been engaged in the drug business in this city for a number of years.

The Kathelene Toilet Company was incorporated at Columbus on the 8d inst. with a capital of \$10,000. Some of the best-known business men in the city are stockholders. The company will manufacture perfumes, toilet powders and kindred articles. The promoter of this enterprise is Miss Kathelene Mueller, whose handsome likeness adorns the letter heads of the concern. Miss Mueller is the proprietress of the pretty pharmacy at 216 Race street. She is a Ph. G. and a thorough business young woman with a bright future.

The store of Herman Serodina at Fifth and Walnut streets will be one of the prettiest pharmacies in the city when completed. The proprietor has secured a lease on the adjoining building and a partition is to be taken out, thus enlarging the establishment. The floors are to be of tile of different colors and the counters will be marble. The ceiling and the other portions of the place are to be in keeping and when completed the Serodina Pharmacy will be strictly up to date in every respect. The proprietor is a thorough business man and will doubtless make a success of his venture. Joseph Hall, who recently resigned as the druggist at the City Hospital will be the senior clerk.

Matters in the case of Joseph Hall, the City Hospital druggist, are somewhat complicated. Superintendent Hendley considers that Mr. Hall has resigned as druggist at the institution, but Mr. Hall insists that he has not. The superintendent is ready to name Hall's successor, but does not like to do so while there is a probability of a disturbance in the premises. Hall is about to put his case in the hands of Trustee Alms, of the board of directors. A "Post" reporter talked with Superintendent Hendley about the Hall case on Wednesday morning. "I do not see how Hall can help leaving now. He gave me to understand that his resignation would take effect October 1. The matter has been discussed and so regarded in that light, and it looks to me as if Hall must go." Mr. Hall was also seen by a "Post" reporter. He says he is yet undecided, but seems to be inclined to press the point that he should not be considered as having resigned until he notifies Superintendent Hendley in writing.

MICHIGAN.

Detroit, Oct. 5.—Ever since the cloud of depression began to gather over the business world, Detroit merchants have trimmed their sails and have borne up well under the strain. There are many idle men here as a consequence, and those who are fortunate enough to have retained their employment, have had their wages reduced. This process of cutting expenses has been almost universal, and as a result, many commercial failures have been avoided. There have been a few especially in the jewelry and clothing lines, but in general the trade interests of this city are in prime condition. Stocks are low and well chosen to meet immediate demands, and the fall buying has been of a conservative nature. Many are of the opinion that the winter will pass before a distinct change for the better will be noticed. The great manufacturing interests of Detroit must first resume operations in order to give the hundreds of wage earners who are unemployed, work. Detroit is not dependent upon its agricultural districts, but upon its manufacturing interests.

Your correspondent paid a visit to the various wholesale and manufacturing drug houses here recently and found them all busy and inclined to regard the future from an optimistic point of view. A comfortable air of activity seemed to pervade the entire building occupied by Farland, Williams & Clark. Their orders are coming in briskly and the firm reports a steady business during the past year. The same was true of Parke, Davis & Co., and Fredrick Stearns & Co. These two send the products of their factories to the farthest corners of the earth. The home trade has been light, most of the orders

coming by mail or through traveling salesmen.

DETROIT ITEMS.

The jumping bean has struck Michigan druggists, and he is not in it who has not some of the phenomena on exhibition in his show windows.

George H. Dawson, who represents Parke, Davis & Company, was in Sault Ste. Marie, Mich., last week. It is said that Mr. Dawson sets the pace for his competitors in the Upper Peninsula. At any rate he has a large and satisfactory clientele in that part of Michigan.

Dr. E. W. Bollo has transferred the Fluegel drug stock to W. C. Lautner. W. H. Copley, who has been in the employ of Mr. Lautner for some time will have charge. He is at present engaged in renovating and putting in a new stock. An opening will occur in a few days.

J. N. Carter, extensively engaged in the manufacture of soda ash at Utica, N. Y., has purchased four acres of land at the River Rouge and with a view of establishing a branch business there. The salt deposit found at Wyandotte and Trenton is known to exist as far as the Rouge and the extent of Mr. Carter's operations will depend upon the amount of that mineral he may be able to develop.

Fire recently broke out in the lozenge department of Parke, Davis & Company. Five men were burned and two of them were taken to Grace Hospital. It is not known how the fire originated as there were no chemicals which could ignite by spontaneous combustion. The total damage to the stock and building amounted to only a few hundred dollars. It might have run up into the thousands.

The Michigan State Pharmaceutical Association, which recently met here, passed among other resolutions, one favoring free alcohol for druggists and not have it apply to large manufacturers exclusively. It is only by giving that benefit to retailers that the consuming public will derive any benefit from the change of duty. The subject of certain catarrh powders was also considered. It is said that they contain large quantities of cocaine and that the users become cocaine fiends before they are aware of the nature of their desires.

Brown's Up-town Pharmacy is the name of a new concern at the corner of Woodward avenue and Sibley street. Mr. Brown boasts of being the man who first introduced the cut rate idea into this city. It will be remembered that he recently embarked in business at 180 Woodward avenue, putting in the finest outfit in town. He skinned along for several months and one night, not so very long ago, the fixtures and entire stock was removed to its present location some ten blocks nearer the suburbs of the city. The general opinion is that the gentleman bit off more than he could chew.

A sleek individual has been playing tricks on various druggists in this city. He enters a drug store and inquires how many bottles of a certain catarrh cure can be spared. There may be five or six or more which are placed upon the counter. Then the individual asks for a small quantity of oil or something that is usually kept in the rear of the store. When the druggist returns he is informed that the medicine will be called for within a few minutes. When the druggist waits a reasonable length of time, and then goes to put the bottles back, they are nicely sealed but empty. The catarrh cure

individual exchanged the bottles. It is believed the swindler is a cocaine fiend because the medicine contains that drug.

THROUGHOUT THE STATE.

Cedar Springs: Tripp's drug store, in the Hubbard building, is being thoroughly renovated.

Grand Marais: Dr. Leighton is building a new store for his stock of drugs. It is nearly completed.

Escanaba: The store recently occupied by William Godley, druggist, will shortly be transformed into a gents' furnishing store.

Battle Creek: Morehouse & Linnihan have bought the drug stock of W. R. Phillips, and will remove the same to 8 West Main street.

Manistique: The stock of the City Drug Store will be moved to better accommodations in Orr Brothers & Company's block early in November.

Saginaw: J. E. Jones, who has been connected with the drug firm of D. B. Prall & Co. for some time, has resigned his position and will locate in Omaha, Nebraska.

Grand Ledge: Fred Chappell, who has been in the drug business here for several months, has taken up his residence at Portland, where he will again engage in the business.

Newberry: Dr. Leighton recently removed his drug store from this place to Grand Marais. He reports that he is doing well and is preparing to build a new store and dwelling.

Pontiac: E. C. Cohn of the city who has been employed for the past two years at the chemical establishment of Whitford & Company, Chicago, left last week for a hunting trip in the Rocky Mountains. He will be absent all winter.

Ontonagon: Meloche Brothers have purchased the store of Meads & Son and state that they will replace the old stock with a new one. The store has been renovated from top to bottom, and when completed they will have one of the best drug stores in Ontonagon county.

Jackson: Frank Porter was recently arrested for obtaining goods under false pretenses at a leading Jackson drug store. He telephoned the firm that he would call for certain goods and that a well-known firm in town wished them. He readily obtained them and almost got away before he was caught.

Pontiac: William J. Remus, who has been engaged in the drug business here for the last two years has purchased the stock of W. A. Swartz & Son in the opera house block at Grand Rapids, and has removed the same to the corner of Jefferson and Wealthy avenues, where he will continue the business. Mr. Remus is a competent pharmacist, having been employed in several drug stores at the second city.

Hancock: Dr. L. W. H. Dodge, of this city, has bid in the drug stock of Lignell & Olander at Calumet Village, and will shortly engage in the business there. John Vivian, of Houghton, will go into partnership with him. There is no drug store in that village and there is no reason why the doctor should not make a success of his venture. In this place there are five who are trying to eke out an existence in the trade. His removal will ease things up a bit.

ILLINOIS.

CHICAGO, Oct. 8.—Drug trade has shown a decided improvement in the last two weeks, and the fall and winter business promises to be far more active than for the World's Fair last year. The work of building up the light stock has formed a steady and uninterrupted demand for all staples, and the attention of dealers is now turning to holiday goods. These are now displayed in all their gorgeous glory in the Chicago houses, and while there are few genuine novelties, the variety is great and the range wide. Many of the dealers buy a mixed and general line of these goods, while others prefer to carry a heavy stock of some particular articles, on which they intend to make a run. The orders throughout are inclined to be substantial, showing a confidence in the future and a willingness to dig up the money planted in the back yard during the uncertain times of tariff juggling and placing it once more in circulation. This applies particularly to the country, as city dealers are compelled to keep up a stock or go out of business, and they could get quick action on small orders, where a country dealer had to carry or else turn trade away. These country orders are also on shorter time than for many months preceding, showing a decidedly more healthy condition.

THE PURE FOOD EXPOSITION.

The Pure Food Exposition being held in this city is attracting great interest. The exhibits are varied and elaborate and the assortment for the delectation of the visiting public ranges from soup to nuts, stopping at all the way stations of a well regulated menu. Exhibitions of preparation and cooking of food in all its forms are given, displays are made of almost every kind of medicated or prepared foods, and lectures are delivered daily on proper selection and methods of feeding the human family. The attendance is large and consists mainly of medical students and physical scientists.

AGAINST REBATES.

The action of the Whiskey Trust in abolishing the rebate system, which has always been considered one of the bulwarks of that institution, has set at rest the minds of many wholesale druggists. For months, in fact, ever since the formation of the trust, there has been much opposition among the drug trade to the voucher or cash rebate system, and dealers have been compelled to do considerable skirmishing at times among the anti-trust concerns to obtain spirits and liquors to supply orders. Now they are enabled to deal direct with all manufacturers at flat prices, and can order from any concern without retreating from the original position. A complete review of the action of the trust is given elsewhere.

At Peoria, Ill., on the 8d inst., the board of directors of the Distilling & Cattle Feeding Company commonly known as the Whiskey Trust, decided to discontinue the rebate system, and a circular letter was ordered mailed to 10,000 agents and distributors throughout the country.

NEW CORPORATIONS.

The following corporations have recently obtained State charters:

Chicago Summer School of Medicine, at Chicago; capital stock, \$25,000; incorporators, William F. Waugh, J. R. Pennington, R. H. Hall, J. J. M. Angear, H. F. Wood and Carl I. Gramm.

Parson & Pattison Chemical Company, Chicago; capital stock, \$8000; incorporators, James H. Parsons, George N. Morgan and Michael F. Cure.

NEW REGISTERED PHYSICIANS.

The State Board of Health has issued State certificates entitling to practice medicine and surgery in Illinois to J. W. Taylor, Tuscola; A. Schreiber, S. J. R. Bullen, V. Pleth and C. J. Schmidt, Chicago. Also midwife certificates to Margaret Miller, St. Louis, Mo.; Augusta Block, Emilie Fromm, Ellen Devine and Anna C. L. Evans, Chicago. V. J. Bordeaux, L. C. Weeks, E. H. Dunn, Chicago; L. M. Powell, Chatham Center, N. Y.; M. L. White, Dixon; R. J. Walker, Tolona; J. M. Baker, Chestnut; G. F. Densmore, Jacksonville; L. B. Doney, Joy; J. C. Kirby, Verona; D. Rice, Galesburg; B. F. Winsett, Nevada, Ia. Also licenses to practice midwifery to A. Felden and M. Niespodziana, of Chicago. W. P. Allen, F. W. Duckett, J. Hosking, G. W. Watts, W. E. Chamberlin, J. J. Muldoon, J. Riddle, E. G. Wilsey, Chicago; G. B. Tuttle, Quincy; L. M. Breed, Winetka; Charles Riley, Manchester; J. A. Menoher, Lawn Ridge; S. M. Bailey, Elsberry, Mo. Also midwife certificates to E. Brady and D. Bartelsen, Chicago.

A BOLD ROBBER.

There is a young man in Chicago who will make a record if given a chance. A youth of twenty years, Abe Marowitz, has turned his attention toward opiates. He is now to be tried in the criminal court on a charge of purloining a basketful of morphine pellets and bromo-caffeine. On Sept. 14 the store of Keasbey & Mattison at 208 Lake street was robbed and about \$30 worth of opiates stolen. Suspicion was directed toward young Marowitz, who had been hanging around the store and seemed to know all about the trade, although never having been employed in a drug store. Manager C. A. Nichol swore out a warrant and after the lad's arrest the goods were recovered from a place in which they had been concealed.

A DRUGGIST'S ERROR.

Chicago druggists are interested in the case of F. S. Foster, the pharmacist of Beloit, Wis., whom a coroner's jury of Roscoe, Ill., recently blamed for a fatal mistake in preparing medicine that caused a woman's death at Roscoe. Foster denies that he is at fault, but that the woman's physician, Dr. W. F. Hobart, who called for the prescription, took the wrong package from the counter in the drug store and administered a deadly poison under the impression that it was a simple headache cure. The question among some in this city is to what extent a druggist is responsible for the proper delivery of medicines and prescriptions.

INCREASE IN SUICIDES.

A number of suicides recently by the aid of morphine and other common poisons has caused public attention to be directed toward the responsibility of druggists in the sale of these drugs. Whatever may be the laws regulating the sale of poisons there is always a leeway for the discretion of the dispenser. In Chicago the practice has become prevalent in some establishments to turn such calls over to irresponsible young men, and this has recently been shown to have been the unobstructed channel to eternity for the unfortunates. The State Board of Health and the State Attorney's office are preparing to co-operate in a movement tending to put a stop to such lax methods.

CHICAGO NOTES.

The new firm of Roberts & White has opened a drug store at Roberts, Ill.

J. H. Rhodes, of Humiston, Keeling & Co., is traveling through Mexico for business and recreation.

Peter Van Schaack, the veteran globe trotter of the Western drug field, has departed on another European tour.

W. W. Hall, formerly a clerk for Oscar Johnson, has purchased the drug store of Oscar Johnson & Co., 6062 State street.

Francis McQuillen succeeds Dr. C. P. Curry as proprietor of the drug store at Seventy-third street and Vincennes Road.

An entire new stock has just been sold by Peter Van Schaack & Sons, to Oscar Scott, of Malta, Ill., who was recently burned out.

The drug store of Chas. Ransch, at No. 8944 Cottage Grove avenue, was recently robbed of a sum of money and some of the stock.

Thos. A. Cobb, buyer for Morrisson, Plummer & Co., is in New York attending the National Wholesale Druggists' Association meeting.

Geo. A. Christman has been appointed a member of the State Board of Dental Examiners, to succeed F. W. Huxman, whose term has expired.

The cold snap has set the retail druggists to placing their hot soda apparatus in position. There is already quite a demand for the warmer beverages.

Now that the hot weather has passed the wholesale drug houses have taken in the sign "We close at 1 o'clock Saturdays," and the doors do not now close until 4 o'clock.

H. H. Crawshaw, for several years clerk for F. M. Mayers, has bought the drug store recently established by L. D. Harris, at the corner of Halstead street and Clybourn avenue.

A drug store will be opened in a short time in the new building at the corner of Ontario and North State streets by J. C. Behnke, of 1025 North Clark street, who will run both stores.

It is announced that Dr. A. A. Washburn, the leading druggist of Tuscola, Ill., has failed for \$12,000 and left town. Chicago jobbers and wholesale dealers hold small claims against the concern.

C. L. Stone & Co., of Twenty-sixth and Calumet avenue, have sold out to Fred C. Hartshorn, and Mr. Stone will attend to the affairs of the Economy Drug Store, at Forty-ninth and State streets.

The Doctors' Club held its semi-annual "ladies' night" meeting at the Lexington Hotel, giving an elaborate banquet in honor of the occasion and according to the principles of the club eschewed "shop" in the addresses.

Among the recent visitors who bought or replenished stocks were: Messrs. Barker, of Clark & Barker, Rochelle, Ill.; Punchee, of Jones & Punchee, Elkhart, Ind.; Ilg, proprietor of the Ilg Pharmacy, Rockford, Ill.; W. W. Ennis of Ottumwa, Ia.

Residents in the vicinity of Oglesby avenue and Sixty-first street are protesting against the proposed location there of a hospital, which will be opened this fall as the Herring Homeopathic Hospital.

A number of Chicago physicians attended the seventh semi-annual meeting of the Northern Indiana and Southern Michigan Homeopathic Medical Association at Elkhart, Ind., on Sept. 27. Among them were Doctors T. S. Hogue, H. C. Allen, T. C. Duncan, C. E. Fisher, W. A. Smith, W. A. Dunn, Howard Crichton and J. F. Beaumont.

MISSOURI.

St. Louis, Oct. 8.—This is the week that the Mound City annually devotes to her fall festivities, and it is the time when a good share of the inhabitants of our tributary country make it a point to visit the city and enjoy the attractions which are centered here at this time. The city is now crowded with visitors, a large proportion of them from the rural districts. The St. Louis Fair is the center of attraction, while the St. Louis Exposition comes in "a close second," and the managers of our opera houses have succeeded in booking plays for this week which are especially attractive to the general public. The police officers all have instructions to be lenient with the visitors, in case our Mississippi river water proves too strong for some of the boys from down on the farm, while the employes of the street car service are doing their best to be accommodating to our friends from Backwoodsville who are not just onto "these here newfangled streetcars." The city with its attractions is evidently very interesting to these honest people who come here to see the good and the bad of a large city; but they are equally interesting and amusing to our city people; while to many they recall thoughts of boyhood days when they were clerking in the little country drug store, or perhaps working on the farm, and how that ever memorable first visit to the city roused the fire of ambition which resulted in one more graduate of the College of Pharmacy, one more city druggist, and a good one too, or one more lawyer, one more merchant, who had spent his early life down among the hills of old Missouri.

THE COUNTRY LAD IN TOWN.

The record of our successful professional and business men of St. Louis to-day, shows that at least seventy-five per cent. of them spent at least part of their boyhood days down on the farm, so it is no wonder that these honest people, with their amusing backwoods ways, receive such a hearty welcome when they make their annual visit to the city.

THE FESTIVITIES.

The Veiled Prophet's Ball, held in the Merchants' Exchange Hall last night, was the big society event of the season. Prominent among the arrangement and reception committees were a number of members of our wholesale drug firms, while the retail drug trade was ably represented by a few of our best looking "Ph. G.'s." The large wholesale houses, especially the drug firms, have arranged to show visitors through their establishments.

BUSINESS IMPROVING.

The wholesale drug houses report business booming this week, as many of their customers have come to the city to take in the Fair, and stock up their stores for the winter.

COLLEGE AFFAIRS.

The St. Louis College of Pharmacy opens Monday, Oct. 8, and the attendance bids fair to be very large. A number of students from outside the city have already come in and matriculated.

The alumni of the St. Louis College of Pharmacy will open their series of scientific lectures, etc., on the evening of October 16, with a debate, lecture and banquet. The question to be debated is: "Does it pay to study pharmacy?" There will be two debaters on each side, and their speeches will be limited to fifteen minutes each. Following the debate will be a lecture by Dr. Curtman. His subject will be "Electrical Displays." The lecture will be accompanied by stereopticon views. The name of Dr. Curtman is too familiar to the pharmacists

and chemists of the United States for it to be necessary for any remarks as to his lecture. The alumni will hold scientific meetings once a month during the winter season, and at most of them they will have a high grade scientific lecture delivered.

The St. Louis Sanitary Works are still in existence. As a result of that notorious trial, the City Board of Health gave the sanitary company thirty days in which to abate the nuisance,—stop the stink. Their time is up on the 12th of October, and thus far there has been no improvement. The citizens of that end of town are well organized, and after October 12, if the works still stink, they will endeavor to have the Board of Health shut the works down immediately. If they do not succeed in this, the Alexian Brothers' Hospital,—a very large institution in the neighborhood,—will sue the city for damages, and the citizens will carry the matter into the civil court and endeavor to get the works condemned. They are also making a political issue of this, and several wards in that part of town will go "anti-stink factory," regardless of the old political parties.

THE DRUG CLERKS.

The St. Louis Drug Clerks' Society will hold its next regular meeting on the 11th of October. The principal business to be brought up at that time will be to complete the arrangements for the ball which is to be held between the first and last of November. The resolution adopted at the last meeting, in regard to the city salesmen doing relief work, has had its desired effect as the wholesale houses have taken steps to protect the drug clerks.

NEWS ITEMS.

O. B. Strub, of the Pool Pharmacy, is laid up with typhoid fever.

Messrs. Hartmiller Bros., of Lebanon, Mo., are here for a few days.

Walter Evens is here, stocking up his store at Clairmore, I. T.

P. M. Post, Ph.G., of Murphysboro, Ill., has been spending a few days in the city.

Mr. Wallace Moore, a druggist at Prairie Creek, I. T., is spending the week with us.

Dr. A. B. Rowe has just opened up a new store at Pendleton and Finney avenue.

Mr. L. A. Dooling, a prominent druggist of Osgood, Mo., is spending the week in the city.

J. W. White, Ph.G., is in from Clairmore, I. T. He reports business very fair in that section.

It is reported that Wm. Billerth, Ph.G., California and Jefferson avenues, is to be married in about two weeks.

A. E. Brown, Wm. Johnson and Ed Hicks, all well-known druggists from Talequa, are here for the week.

Chas. E. Mengel, Ph.G., prescription clerk at Vogt's Pharmacy, is quite sick at his home at California, Mo.

E. H. Redburn, Ph.G., formerly with the St. Louis News Company, is now in the employ of the Moffit West Drug Company.

Mr. Rudolph Vitt, head clerk for Prof. Francis Hemm, has been confined to his bed for several days with an abscess on his leg.

C. W. Wall, treasurer of the Meyer Bros. Drug Co. has returned from his six weeks' vacation at Atlantic City and other Eastern points.

On September 19 Mr. O. C. Ruge was married to Miss Marie Hemmerle. Mr. Ruge is proprietor of the drug store at 19th and Hickory streets.

The boys are all sending in their congratulations to their stately friend, Max Heinrich, as he is now the father of a big bouncing boy.

Mr. R. M. Walker and R. L. Fuller, Ph.G., two prominent druggists of Ft. Gibson, I. T., are enjoying a week in the city and placing large orders with the wholesale houses.

J. P. Carter, Ph.G., and Dr. Murry, of Talequa, I. T., are making things lively around the wholesale houses this week. It is hard to find two finer looking men than this pair.

Mr. Paul Gieselmann, junior partner of a large drug firm of Memphis, Tenn., has been in the city for a few days. He says he comes to St. Louis to have a good time and he never goes away disappointed.

A number of St. Louis druggists received invitations to the wedding of Alton Walker, Ph.G., to Miss A. Kaufman both of Pine Bluff, Ark. The wedding takes place to-day. Mr. Walker is well-known in St. Louis drug circles.

Fred Koch, Ph.G., head clerk for H. H. Vogt, may be a good judge of pharmaceutical preparations, but his father, who is a farmer, says he is no good in a horse trade. They tell it on him that he recently bought a race horse to present to his father; the old gentleman came to the city to take the present home, but concluded it was not worth car-fare, and the young man after keeping it a month sold the old "once was" for the large sum of eight dollars.

TENNESSEE.

NASHVILLE, Tenn., Oct. 5.—The Tennessee Pharmacal Company has been incorporated for the manufacture of pharmaceuticals by the following gentlemen: R. L. Eves, president; J. W. Thomas, vice-president; R. H. Gordon, secretary and treasurer; and Max Bloomstein, E. B. Davis, J. L. DeMerville and R. E. Page, directors.

W. H. Bunch, lately with S. S. Neal, is now with Sperlock-Neal Co.

Mr. McLauren, the able assistant of W. S. Sewell, is attending lectures at Vanderbilt.

It is reported that Van Valkenburg & Co. will soon begin the erection of a new store building.

Vaughn & Porter have increased their force of prescriptionists in person of W. H. Harrison.

Lex Roscoe, the Main street pharmacist, is also engaged as city salesman for Kirkpatrick & Co.

The litigation over the store of A. L. Stephens has been decided and Mr. Stephens is again in charge.

Colorado Pharmacists.

The fourth annual meeting of the Colorado State Pharmaceutical Association was held in Pueblo on September 24th and 25th.

Although the meeting was not large, those that were present had both a pleasant and an enjoyable time.

J. W. Turrell, the president, was absent and so A. W. Clark, first vice-president, presided over the sessions.

Among the traveling men in attendance were Dan. Y. Wheeler, Richardson Drug Company, John F. Flavan, Meyer Drug Company, W. G. Taylor, Morrison

Plummer & Company, and E. Ackerman, Moffit-West Drug Company.

The minutes of the first day's session are certainly of the "phunny kind" as the following extract will show.

"The President suggested that the representatives of the Eastern wholesale houses, be called on for speeches. Mr. Wheeler, in making a few remarks said he had come prepared with a lengthy speech, but, as J. Stromberg, of Denver, was sure it was one of Ingersoll's, he would be compelled to let it go. And as a delegate from the State Pharmaceutical Association of Missouri, would invite all the members to be present at their next meetin in June.

On motion a vote of thanks was extended Col. Dan. Y. Wheeler.

Mr. Flatau was called for but wished to be excused until 2 A. M. next day.

On Monday evening, the Pueblo druggists gave their visiting brethren a reception at the Grand hotel. A fine programme was presented and refreshments served during the evening.

Another business meeting was held on Tuesday morning and officers for the ensuing year elected as follows:

President, C. H. Wells, of Pueblo; first vice-president, E. L. Scholtz, of Denver; second vice-president, S. H. Arcularius, of Colorado Springs; Secretary, Prof. John Kochan, of Denver; treasurer, J. F. Fezer, of Greeley.

John Kochan, E. L. Scholtz, R. P. Davie, of Cripple Creek, C. M. Ford, of Denver, and John Stromberg were appointed delegates to attend the convention of the American Pharmaceutical Association that meets in Denver in 1895.

Another list of ten names was prepared by a special committee to be presented to the next governor from which he shall choose the State board of Pharmacists for 1895-97.

Sports were held on Wednesday afternoon and the ladies participated in such amusing contests as nail driving and spoon races.

The prizes for these events were donated by Johnson & Johnson, Jno. Wyeth & Bro., J. J. Riethman & Co., W. A. Hover & Co., F. Stearns & Co., Myer Bros., Trommer Malt Co., Moffit-West Drug Co., and others.

The convention was closed with a grand ball at the Colorado Musical Palace.

Next year the meeting will be held in Denver, two days previous to that of the American Pharmaceutical Association.

NOTES ON PRICES.

The Rebate System Abolished.

The announcement by the Whisky Trust of its intention to abandon the rebate system was a surprise to the public. The opponents of the trust, however, who have studied the situation, declared that the announcement, instead of being a piece of news to them, was official confirmation of a state of affairs known to exist for many months, and that it was knowledge of this condition that caused the institution of suits to test the validity of the rebate voucher system.

One of the members of the Rebate Vouchers' Protective Committee, when asked for an explanation of the situation by a reporter for The New York Times, said:

"It has been an open secret to those conversant with the affairs of the trust that the rebate system had to be given up.

The trust could not risk an adjudication upon a matter so vital to its interest. At the same time the customers of the trust all over the country who held trust rebate vouchers determined no longer to buy under the rebate system, and insisted upon the payment of their vouchers. Advised by counsel, they stood on their rights to have their rebate vouchers paid, and refused to make further purchases except 'flat,' namely, without rebate.

"This movement reached its culmination about a month ago in the formation of a committee consisting of Messrs. Martin R. Cook, Henry E. G. Luyties, and S. M. Rice. This committee at once proceeded to enlist the entire trade in the movement, and its appeals have met with a spontaneous and overwhelming response. Mr. Greenhut, who has never been accused of a lack of shrewdness, realized that it would be well to make a merit of necessity, and has now conceded the demands of the committee to the extent of the abandonment of the system. In this way he, no doubt, hopes to head off three very serious menaces to the schemes of the trust managers—first, an adjudication of the legality of the rebate system; second, the demand of the rebate voucher holders through the committee for a rigid investigation of the financial affairs of the trust, and, third, which is perhaps the most important, the indication by the committee of the importance of the \$2,500,000 bonds deposited with the Central Trust Company to secure the rebate fund.

"It is plainly evident that the \$2,500,000 bonds held by the trust company will prove the controlling factor in any scheme for the reorganization of the property, and that foreclosure under the \$1,000,000 bonds controlled by Messrs. Morris and Greenhut would be impossible without considering the bonds held in trust. It is clearly the intention of the managers to endeavor to release these bonds from the Trustee by payment of what the trust will call uncontested rebate vouchers.

"Under the peculiar announcement of the Distilling and Cattle Feeding Company it will be seen that in order to secure the payment of rebate vouchers uncontested up to now, it will be necessary for rebate voucher holders to continue to purchase of the trust for the next six months, and those who purchase outside will, according to the peculiar conditions of the rebate voucher, forfeit the amount of their certificate. This, of course, is a question for the courts to decide.

"The official announcement of the abolition of the rebate system is simply a confirmation of what has been known for some months. Purchasers have been able, whether holders of rebate vouchers or not, to buy 'flat,' when insisting that their purchases be in that way. The situation has not changed in the least, and this latest move is simply an attempt to control the trade for the period of six months, or to avoid the payment of such certificates uncontested up to now, should the dealer venture to make purchases outside the trust. The question of competition, however, now becomes more important than ever, and the ability of the trust to manufacture and distribute spirits in competition with independent distillers will at once be put to the test. Under the burdensome contracts with its Eastern and Western distributors, the trust labors under the great disadvantage of being compelled to pay a large profit

to the distributors for the distribution of its product. The independent distilleries are rapidly organizing methods of distribution on an economical and intelligent basis. Through these means their product will be distributed to the trade at a minimum cost. If this last move of the trust managers is intended to avoid investigation of its affairs, it will prove of little avail."

Wood Alcohol Makers Protest.

The representatives of the different alcohol interests are making representations to the secretary of the treasury as to the means which may be adopted to secure free alcohol. It has been made clearer than it was before that the rival alcohol interests are asking the secretary of the treasury to take action which will be of benefit to their respective trades, and the recommendations which they make are distinctly contrary to each other. The representatives of the manufacturers of wood alcohol, for instance, desire that the secretary of the treasury shall not make any regulations, that he shall nullify the law as to free alcohol by holding it in abeyance until next winter, when they hope to be able to defeat it altogether by repealing the law. It is not without significance that this interest is represented by a man who has been conspicuous in the lobby for years.

The claim made on behalf of the manufacturers of wood alcohol is that if alcohol is made free they cannot live, and that the six millions of capital which, they say, is invested in the distillation of wood alcohol, will be put in jeopardy and the distilleries altogether closed. They maintain that the distillers of wood alcohol cannot compete with free grain alcohol.

The wood alcohol is used only as a solvent in the making of varnishes, and in like manufactures. It cannot be used in the manufacture of medicines or drugs in any way because it cannot be made palatable, and is only used on account of its present higher price. If, however, it shall be made free, the corn or grain alcohol can be as well used as a solvent by the manufacturers of varnish, and the manufacturers of wood alcohol say they will be driven from the field. On the contrary the representatives of the druggists' associations and of proprietary medicines say and insist that regulations can be made which will give effect to the letter and the spirit of the free alcohol provision of the tariff bill, and would entirely protect the interests of the government. The secretary of the treasury is known to have been of the opinion that the obstacles to giving effect to the free alcohol provision were insurmountable.

The representative of one of the largest patent medicine manufactories of Massachusetts says that he knows that regulations can be adopted which will fully protect the interests of the government from fraud, and he is confident that the secretary of the treasury will not nullify the law, but that he will issue regulations to give effect to it. This gentleman occupies so high a standing, and is so well informed as to internal revenue matters, that much importance may be attached to his opinion.

It has been suggested that the secretary of the treasury collect a fee or tax from those who use alcohol with which to pay the expense of the officials necessary to superintend the execution of the law. The suggestion proposes a course which the secretary of the treasury could not entertain, as the act suggested is illegal.

The secretary has no right by regulation to legislate. The secretary could not impose such a fee or tax, and if he should do so he would have no power to compel the payment of it. That is the only suggestion which was supposed to be practicable, and that is already ruled out by the secretary of the treasury as involving a proposition to do an unlawful act.

The druggists' committee suggested that a "a manufacturer," within the meaning of the law, must be a user of alcohol in the arts or in any medicinal or like compounds, and that he must have secured the alcohol so that he can exhibit the tax-paid stamps. Moreover, they suggest that the total contents of every package for which a claim for rebate can be sustained must have been used in the manner and for the purpose described in the statutes.

The Massachusetts manufacturers of proprietary medicines employed Governor Boutwell, ex-secretary of the treasury, to represent their interests. He appeared before the secretary of the treasury last week, and was given some time to prepare a brief. He will submit to the secretary regulations which he regards as practicable for the protection of the interests of the revenue. Governor Boutwell was at the head of the treasury department during some of the important early stages of internal revenue legislation, and is an expert in drafting regulations.

Whiskey Trust Cuts Rates.

Those who have been following the course of the Whiskey Trust were rather surprised yesterday to learn that another cut had been made in the price of spirits. When the Trust officials decided to do away with the rebate system the amount of the rebate, which was 7 cents a gallon, was knocked off the price to the customers, making it \$1.27 a gallon.

This reduction was made by the American Distributing Company, which is the selling agent for the Trust, and yesterday the distributing company announced that the price had been reduced still further, or to \$1.20 a gallon. With the present prices of corn it costs 16½ cents a gallon to manufacture spirits, and 2 cents a gallon to put it down in New York, making the real cost per gallon 18½ cents. The tax is \$1.10 a gallon, so that the total cost is \$1.28½ a gallon for spirits which the agents of the Trust are now offering to sell at \$1.20 a gallon. Wall street men who are interested in whiskey trust matters were rather puzzled at this course, except on the theory that the Trust has to have money to pay its rebates, and that, as they had about 4,000,000 gallons of old spirits which could easily be worked over, they were trying to raise the necessary funds by bidding way under the market price for trade. The committee of the holders of rebate vouchers, which has been formed here, has been pushing the Trust very hard, and the latter has been trying, it is said, to raise money in every way possible, but without success.

TRADE NOTES.

That the "M. & R." lozenge continues to maintain its recognized superiority throughout the trade is indicated by the growing demand which the manufacturers continually report. It secured the medal at the World's Columbian Exposition last year and the manufacturers ask any pharmacist who is unfamiliar with this brand to compare it with others before placing his order.

When you are in need of labels or cartons

send for samples and prices to E. B. Read & Son, of Baltimore, Md., and the attractiveness of their styles and prices will assuredly result in the placing of your order with them.

In the advertisement of E. N. Rowell Co., Batavia, N. Y., are shown cuts and boxes for pills, capsules, etc., and extraordinarily low prices are quoted. Druggists who are wishing to economize in expenses will do well to write this firm for further information, mentioning this journal. The manufacturers are well equipped for producing this line and can meet all competitors and desire an opportunity to figure on your work.

Among the number of lozenges advertised for throat troubles none have had a better sale and become more popular wherever introduced than the Swiss lozenge. One druggist in Philadelphia has sold over a hundred boxes, a purchaser finding relief having advertised the lozenge among his friends. If you will send a trial order for a dozen boxes, price \$1.85, the manufacturer will send you free a very useful binding case which is both a file and binder and from which papers can be removed without any derangement. This is an article that every druggist needs, and when you can procure it for nothing why hesitate to order? Address H. Edward Wendel, corner of Third and George streets, Philadelphia, and kindly mention this journal.

Silver Truss.

Perhaps the greatest difficulty persons experience who are compelled to wear a truss is its proper adjustment, and manufacturers of the old style of rubber trusses employ experienced fitters, who claim that this is half the battle in attaining success. Druggists who have been asked to fit on a truss and who are not experienced in this matter, will realize the correctness of this statement. Since the invention of the silver truss this difficulty is entirely removed, as the patient can adjust it for himself. It is easy to wear and whatever position the body may assume the truss never moves. It is guaranteed to retain the severest hernia with comfort and almost every druggist who has stocked this truss pronounces it to be the truss of the future. If you are not already acquainted with the American Silver Truss, you should by all means send at once for their pamphlet, and with the testimony of the hundreds before you, you will no doubt soon place an order for these goods. Manufactured solely by the American Silver Truss Company, 290 Main street, Buffalo.

Hoarse in the Throat.

This new attractive cough lozenge retailing for 10 cents has met with great success. It is a winner. The trade wants it because it cures the customer, and he of course recommends it to his friends. To introduce it thoroughly the manufacturers are making a very liberal offer all about which you can learn by referring to page 16 of this issue.

A Silent Salesman.

A great deal has been written recently about the proper display of goods. Window shows, show cases and stands of every description have been commented upon for the benefit of the druggist. The improved designs of Campbell's practical sliding display trays seem to be what every druggist needs for his show case. The highest medal was recently awarded them by the World's Columbian Exposition. The special advantage is that you can show more goods and remove each tray separately and replace again without deranging the whole stock. You can see a cut of this new design by referring

to page 20 of this issue, and if you will drop a postal card to the manufacturers for an illustrated circular you will get all particulars. Address the Campbell Cutlery Co., Syracuse, N. Y., and kindly mention this journal.

Grape Food.

Physicians all over the country are now recognizing the value of grape juice for nursing mothers, delicate children and invalids. It is a fine tonic for the stomach and productive of good results in all troubles of the liver. There is no liquid food that has brighter prospects than grape juice and none compares in flavor and body with Dr. Welch's, which is prepared from the rich Concord grapes grown around Vineland, N. J. This brand is very popular with physicians and druggists and the manufacturers will be pleased to mail you a two ounce sample bottle with trade prices, etc., on application. Address the Welch Grape Juice Co., Vineland, N. J. Mention THE AMERICAN DRUGGIST.

Lucilline.

Perhaps few of our readers would fail to notice a recent display made by the Boeshardt & Wilson Co., Philadelphia, in this journal, of the various styles of packages in which their Lucilline is put up for the retail drug trade. This article is made according to the U. S. Pharmacopoeia, and is warranted chemically pure, neutral and sweet. The reputation of this product among physicians, pharmacists and manufacturing chemists is now so thoroughly established that further comment seems superfluous. If druggists, when ordering of their wholesaler, would insist upon specifying this brand they would be sure to obtain a satisfactory article. The firm manufactures all kinds of cylinder and high grade machinery oil, and will be pleased to furnish quotations in large or small quantities on receipt of such requests from our readers.

Figaro Liqueur.

For the past two months the drug trade has been advised to withhold placing their orders for liqueur till the above new brand should be ready for delivery. It has now arrived. We said new brand because as yet it is comparatively unknown to the drug trade, but we learn from the manufacturers that for some years they have been selling paste liqueur, manufactured from liqueur grown in the Province of Aragona, to the tobacco trade and that on account of its purity, flavor and sweetness it has always commanded a price several cents higher than domestic makes. These goods are put up for the drug trade in strong and handsome cardboard boxes weighing one kilo, 12 boxes to the case; it also comes in sticks 85 and 25 to the kilo. The small size retail 8 for 5 cents, and the large size 5 cents each, upon which the dealer makes a profit of 100 per cent. On page 5 of this issue appears a cut of an advertising sign which the manufacturers will send free to any customer. It is quite an elegant lithograph, done in twelve or thirteen colors.

This liqueur will also be extensively advertised to the public through magazines and in other ways, so that druggists need have no fear in carrying it in stock. The New York manager, Mr. Utard, reports many large orders already received and wishes to notify the trade that they have on hand a sufficient quantity to insure prompt delivery. They will be pleased to mail you a sample in order to test for yourself the correctness of their statement, and in making the request kindly mention this journal.

The "Herald," of Glasgow, Scotland,

speaking of the "Four-Track Series,"—the New York Central's guide book—says:

"No effort is made in this country to produce railway guide books that can compete with this Series. The scope of the books gives every opportunity for the display of the varied charms of American scenery, there being views on the Hudson River, in the Adirondack Mountains and Catskills, on the St. Lawrence, Niagara Falls, etc. The great feature of the guides is the admirable pictures."

A copy of the illustrated catalogue containing a thorough review of the "Four-Track Series"—books, maps and etchings—will be sent free by mail, postpaid, to any address in the world, by George H. Daniels, General Passenger Agent, New York Central & Hudson River Railroad, Grand Central Station, New York.

A Big Cut in Tablets.

The prices of tablet-triturates and compressed tablets were reduced about two-thirds by Parke, Davis & Co. some weeks ago, and, as might have been expected, created a great commotion in the trade and among the hundred or more manufacturers of these modern substitutes for the old-fashioned pill. The growth of the tablet-trituration business in this country has been phenomenal, and it is a well understood fact among jobbers that the tablet manufacturer, by going directly to the physician, takes the place of the wholesaler as well as the retailer, disorganizing and undermining the regular channels of business and hurting dealers of all kinds, both large and small.

A very forcible illustration of this change in affairs was noticed when the Government last asked for bids for medical supplies. Instead of asking for hundreds of thousands of pills of various kinds and vast quantities of fluid extracts and similar preparations, these items, which had long been the mainstay of the requisitions, were cut down to a remarkable small amount, and instead were lists of millions of tablet triturates. This is only one indication of the way the jobber has been injured by the rapid and persistent introduction of tablets directly to the doctors. Messrs. P. D. & Co. will have the thanks of the whole trade for making it very difficult if not almost impossible, for the tablet manufacturer to drum the physicians any longer. Several houses in that line have already gone out of business, and others contemplate doing so, as very few houses in the tablet business can manufacture them as low as they are now being sold.

To Prevent Substitution.

We imagine that Frank A. Ruf lies awake nights studying how to get the best of counterfeiters. In order that the physician may be better assured that his patients are getting the genuine Antikamnia, Mr. Ruf has ordered in all old stock that is on the market and is replacing it with new. Physicians are now all advised to see to it that they procure, or their druggist procures, only that preparation which bears the seal. As now put on the market, each tablet has imprinted on it a monogram. The latest is the "Antikamnia and Codeine Tablet," composed of 4 gr. Antikamnia and 1½ gr. Codeine. All druggists having unbroken packages of the old style should send them at once to the Antikamnia Chemical Company, St. Louis, and exchange them for new goods free of charge.

Review of the Wholesale Market.

NEW YORK, Oct. 9, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

While there has been no material increase in the volume of business transacted in the several departments of drugs, dyestuffs and chemicals since our last, the reports to hand from importers and jobbing druggists indicate a speedy return of speculative interest and the outlook is considered favorable for all sections of the country. The presence in this city of a number of prominent jobbers from different sections of the country afforded the opportunity of obtaining their views on the condition of the trade in their different sections, and it was elicited with an almost unanimity of expression that the business outlook in the South, North, East and West was never better. Money is reported easier and the rate of interest lower, while comparatively little difficulty seems to be experienced in making collections. The tone of the general market remains steady and few changes of consequence have occurred in the interval. Opium has revived somewhat and quotations have been advanced. Alcohol is unsettled and prices may be regarded as entirely nominal. Mercurial compounds have advanced in sympathy with the metal. Anise, bergamot and cassia oils continue to reflect a rising market. Nitrate of silver comes lower from the manufacturers. Additional changes are noted in the tabulated statement given below as follows:

Advanced.	Acacia gum.
American Saffron.	
Opium.	Declined.
Anise Oil.	Sodium salicylate.
Cassia Oil.	Canary seed.
Blue pill.	Mexican Sarsaparilla.
Bergamot Oil.	Nitrate of Silver.
Haarlem Oil.	Poppy seed.
Saltpetre.	Damiana leaves.

DRUGS.

ALCOHOL is in a less settled condition in consequence of the radical change made recently in the policy of the trust with respect to the rebate system, which has been abolished. Net prices are now quoted for car load lots as \$2.38@2.40 for 10 bbl. lots, and \$2.42 for single barrels. Independent producers evince no disposition to cut these prices. Prices for the present remain nominal, and are likely to remain so until the outside lots on which the old tax was paid are exhausted. It is extremely probable that prices will then advance 5 or 10 cents per gallon.

ARNICA FLOWERS, new crop, are meeting with increased attention and we are reported numerous sales of prime at 8½c. The range of the market is 8½c@9c, as to quality.

BALSAM COPAIBA is scarce, and Central American is almost out of market.

BALSAM FIR, Canada, is also in limited supply, and \$3.25@3.30 is the quotation for cans.

BALSAM PERU is not inquired for to any extent. The quotation from first hands is \$1.60, but jobbers are quoting

up to \$1.75, and the current sales are making this range.

BARKS.—Cascara Sagrada, new crop is offered to arrive at 4c; the current quotations remain at 4½c@6c.

BELLADONNA LEAVES are meeting with some attention, and among the various transactions we note a sale of some 2,000 lbs. at 10½c. The coming crops of both this leaf and Hyoscyamus are, according to Hamburg despatches, partial failures.

CACAO BUTTER continues in good jobbing demand with large sales of English reported at 32c. We quote the range at 32½c@33c.

CASTOR OIL is in improved supply and manufacturers are meeting the requirements of the trade with more promptitude. Numerous transactions of a jobbing character are reported, the current sales being at the quoted range of 10½c@11½c, and 11c@12c for barrels and cases respectively.

COCA LEAVES are scarce, and for the small available supplies of Truxillo and Huanaco, 20c and 30c are asked respectively.

COD LIVER OIL is less animated, and no special efforts are making to urge sales. Prices are expected to advance shortly though the present range is quoted at \$27@29.

CODEINE has declined 25c per ounce, the quotations from the hands of domestic manufacturers being \$3.45 for the alkaloid and phosphate in bulk, \$3.50 in ounces and \$3.70@3.85 in eighths. Sulphate 85c. per ounce less.

COLOCYNTH APPLES, Trieste, are in improved position in consequence of a slight scarcity; sales are reported at 42½c and some holders are quoting up to 48c.

CUBEB BERRIES are easier, though no quotable change in price is reported. XX is held at 14c@16c and common and ordinary at 11c@12c.

ERGOT continues dull and we are unable to report any improvement either in the way of demand or prices. New crop is being offered a shade lower than the prices quoted for old, which are 18c@20c for German and 20c@22c for Spanish.

LYCOPodium has declined in the interval and 49c@53c is quoted nominal as to brands.

MORPHINE is somewhat unsettled, manufacturers' prices having been reduced since our last, and these in turn being shaded from secondhands. The new quotations from manufacturers are: bulk, \$1.80; ounces, \$1.85, and eighths, \$2.05@2.10. Some of the trade are offering well-known makes at \$1.55 and P. & W. in eighths, \$2.07½.

OPIUM has advanced in the Smyrna market within the past few days, and prices here are slightly higher and firmer in sympathy. While the rise is attributed to an increased demand at the sources of supply, it is difficult to obtain any exact information bearing upon the subject. Numerous reports are given circulation regarding prices in Smyrna and Constantinople, but the contrary tenor of these greatly detract from their value, rendering it almost impossible to state the position of the article accurately. In this market the feeling is decidedly stronger and it is not deemed likely that the prices will recede from the present values which represent advances of 25c@30c over previous quotations. Up to the hour of going to

press we hear of nothing offering below \$2.10 in single case lots, and the sensitive condition of the market disposes some to look for an advance upon this figure. For less quantities and cases the quotation is \$2.12½@2.15, and for powdered, \$2.55@2.65.

QUININE continues in steady moderate request and firm. Foreign brands in occasional instances offer at 24¼c@24½c, as to brand and quantity. Cable advices from Amsterdam report a decline of 25 per cent. from the previous offering in the sales of cinchona bark. The fall is attributed to the heavy offering and the liberal shipments that have been made for some time past from Java.

SAFFRON, American, has been advanced to 40c. from the hands of jobbers and even this quotation is regarded as nominal, the principal holders declining to name a price.

SENNA, Tinnivelly, is in fair moderate request and among the recent transactions we note a sale of 5,000 lbs. at 5c. Natural Alexandria is quoted at 18c@30c.

SUGAR OF MILK is developing an upward tendency and values are firm at 10c@11c as to brand.

TONKA BEANS continue in good jobbing demand at the previous range of say 20c@35c for Para, and \$1.60@\$1.70 for Angostura.

VANILLA BEANS have been in good demand and values are strengthening. In all, some 18,000 lbs. have changed hands during the past week. The market is now steadily gathering strength and \$7.00 is quoted as an inside value for the lower grade of the whole, with good to prime quality running up to \$13.00. Cut are now held at \$5.50@\$6.00.

DYESTUFFS.

CUTCH continues in moderate demand at previous values of say 5¼c@6c. for prime quality bales.

DIVI DIVI continues held from store at \$60.00@\$70.00 from store.

GAMBIER continues in fair consuming inquiry and quotations for store goods remain at 4¼c@4½c, while exwharf for steamer and sail as to quantity. To arrive the price remains 4½c.

NUTGALLS, Blue Aleppo, are held and purchases can be made at 4¼c@4½c. Jobbing fairly at 13c@13½.

SUMAC, Sicily, is held and selling at \$60.00@\$65.00. Parcels in transit quoted \$56.00@\$60.00 and forward shipments \$55.00@\$60.00.

CHEMICALS.

ACETATE OF LIME, grey, continues quiet at \$1.75@\$1.87½; brown is also inquired for to some extent with the current sales at \$1.25@\$1.30.

ARSENIC, white, is passing out to the trade in fair jobbing lots at the range of 3½c@3¾c. as to brand and quality.

BLEACHING POWDER is passing out into channels of consumption in fair volume with sales of German at \$1.62½ and English at \$1.75@\$1.87½.

BLUE VITRIOL is meeting with good jobbing inquiry at the range of 3¼c@3½c. as to quantity.

BORAX remains quiet with the tone of the market easy. Refined California offers down to 6¾c. for car load lots. City is quoted 6¾c@7¼c. and concentrated 6¾c@6¾c. as to quantity.

CARBONATE OF LITHIA is higher

having been advanced abroad to the equivalent of 30c. per pound.

CAUSTIC SODA is easier with English quoted \$2.12½@\$2.22½ for 70 to 74 per cent. and \$2.25 for 60 per cent.

CHLORATE OF POTASH continues dull and the absence of important demand gives to the market an unsettled appearance. English crystals and powdered quoted nominally 10¼c.@10½c.

CREAM TARTAR is fair and in good demand at 17c. for crystals and 18c. for powdered.

MERCURIAL preparations are all slightly higher in sympathy with quicksilver. Blue pill has been advanced by the manufacturers to 31c.@32c. and other lines in proportion. Mercurial ointment has been advanced 1c. by the manufacturers. Half mercury is now quoted 35@37c. and third 26@28c.

NITRATE OF SILVER has been reduced by the leading makers from 42¼c.@44c.

NITRATE OF SODA is selling down to the point of 2c. or 2¼c. in a quantity way, and in some quarters lower prices are being quoted.

SODIUM HYPOSULPHITE is obtainable at \$1.70 in casks and \$1.75 in kegs, though the prices generally required are \$1.85@\$1.90.

SODIUM SALICYLATE has been reduced by the manufacturers and is now offering upon the basis of 95c. per pound for bulk in lots of 25 pounds or over.

SUGAR OF LEAD, white, is a trifle easier with sellers now at 8¾c.

TARTARIC ACID continues in good demand and firm at the previous range of say 22¼c. for crystals and 23c. for powdered.

QUICKSILVER continues in fair average demand with the general asking price 51c.@52c. as to quantity.

ESSENTIAL OILS.

ANISE continues held and selling moderately upon the basis of \$2.00@\$2.10.

BERGAMOT, Sanderson's, is higher, having advanced in the interval to \$2.10.

CASSIA is held in some quarters at \$1.10 and upwards, but this is in excess of the actual selling price, \$1.05@\$1.10 being quoted generally.

CLOVE remains quiet but steady at 55c.@60c. as to quantity.

PEPPERMINT is without change of consequence either as regards price or demand. H. G. H. is slightly easier at \$2.25@\$2.30. For bulk \$1.60@\$1.75 is asked for Western and Wayne County, though purchases can be made in the country at lower figures.

ROSE OIL.—No prices have yet been established for new crop oil, but an appreciation over present values is looked for as the stock abroad is reported under good control.

WINTERGREEN shows no special variation; values are steady at the previous range.

GUMS.

ARABIC is in good jobbing demand and firm at the recent advance; sales of sorts within the range of 13½@14c.

ASAFETIDA is meeting with a fair jobbing inquiry and with a scarcity of prime grades, prices are firm upon the basis of 23¼c@24; inferior goods are selling down to the point of 15c.

CAMPBOR shows no special variation. Domestic is jobbing at 42@43c. for barrels and cases and Japanese 42c. for 2lb. blocks.

CHICLE continues quiet and values are easy at the previous range, of say 26½@30c. as to quantity and holder.

DAMMAR, Batavia, is higher owing to scarcity and unfavorable crop reports. Holders are now quoting an advance to 17½@18c.

SHELLAC continues in firm position and a steady, moderate jobbing demand is experienced. Holders generally are reluctant sellers of quantities, the reduced stock suggesting a cautious policy.

SENEGAL, picked is about out of market, and it is difficult to say when the stock may be replenished.

TRAGACANTH, Aleppo, is held at the full previous quotation of 30@62c. as to quality, and a very satisfactory jobbing business is being completed daily at this range.

ROOTS.

GALANGAL is reported higher at primary sources; numerous small sales are reported in this market at 4¼c.

GENTIAN is in good demand; among other transactions, we note sales of 5,000 lbs. at 3¼c.

GINSENG is easier and in less request; recent export shipments have not brought good returns and best grades may now be obtained at \$3.50.

IPECAC is firm in view of the increased cost abroad. The range of the market is 90c@\$1.10, though stock at the inside figure is of very inferior quality.

JALAP is maintained firmly at 24c.@26c. with moderate sales at this range.

SARSAPARILLA, Mexican continues in heavy supply and in the absence of important demand, the tone of the market is easy. There is a moderate inquiry and sales are making at the range of 6¼c@7 as to quality and quantity.

SENEGA does not vary from \$1@32c. The business is mostly confined to small jobbing transactions.

SEEDS.

CANARY continues to offer at 3c. for Smyrna, and 3¼c. for Sicily, but current orders are only for jobbing quantities.

CARAWAY continues in demand and firm at 9c. for spot and this month deliveries: Forward deliveries are quoted 8c.

CELERY does not vary from 10@10½c.

FENNEL promises a short crop, due it is said to excessive rains, and an advance is anticipated.

HEMP, Russian is firmer abroad and holders here are maintaining the full previous quotation of 2¾c.

POPPY, German continues dull and easy with 4¼c. quoted as acceptable.

For other lines there is a quiet though generally steady market.

This is the way an Oregon advertiser puts it:

Angels don't have piles, but piles of people would like to be angels; but can't because they've got piles, so use Haller's Australian Salve and cure the piles and be an angel. For sale by G. W. Feegman.

American Druggist and Pharmaceutical Record.

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The **AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD** is issued on the 10th and 25th of each month. Changes of advertisements and all copy for publication should be received by the 5th and 20th of each month.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

What Our Advertisers Say.

In Receipt of Inquiries Daily.

We are pleased to report that our advertisement in the "American Druggist" is a winner. Almost daily we are in receipt of inquiries from dealers who mention your paper, and after a little correspondence we open up trade with them.

Your excellent little notices have attracted many dealers' attention to our goods, and for which please accept our thanks. Those dealers who had previously been bothered so much with the old style trusses, will no doubt often have occasion to feel very grateful for your recommendation.

We wish you sincere success.

AMERICAN SILVER TRUSS CO.
Buffalo, N. Y.

THE PHILADELPHIA DRUGGISTS ON THE ALCOHOL QUESTION.

THE action taken by the American Pharmaceutical Association in practically opposing the introduction of tax-free alcohol in medicine has met with the most pronounced criticism from the druggists of Philadelphia, who are inclined to think that the Association allowed itself to be frightened into taking a position not at all in accord with that of the druggists of the country at large. The whole subject of tax-free alcohol is exhaustively discussed in a paper presented at the Philadelphia meeting by Joseph W. England and the more important portions of this paper as reproduced in our Philadelphia letter makes interesting reading.

As noted elsewhere in this issue the Secretary of the Treasury has announced that the law was made practically inoperative by reason of failure to provide the funds requisite for its enforcement. It would seem therefore that for the present the whole matter is in abeyance. It is reported, however, that many large manufacturers have made arrangements to keep close track of all the alcohol used by them and that they propose to submit proofs on this head together with the cancelled stamps and to demand a rebate of the tax. It is argued by some that if conclusive evidence is submitted along this line the manufacturer could obtain the rebate even if he had to resort to the courts to do so.

One of the most serious difficulties surrounding the question of tax-free alcohol is that of devising regulations which while granting the desired end so far as medicine is concerned still offer adequate assurance of protection against fraud as to alcoholic beverages. The association or the individual who can devise and formulate a plan in detail compassing these ends will do a great deal toward procuring tax-free alcohol. Here then is a field of labor for the Philadelphia druggists. Let them formulate in detail a set of regulations which will meet all the requirements of the case and then they will have something practical to lay before Congress and the country at large.

In passing it may be pointed out that in just such cases as these the Interstate Retail Druggists' League, were it thoroughly organized all over the country, would furnish at once a means of obtaining a trustworthy census of the opinions of the trade and of placing the wishes of the trade before Congress forcibly and with no uncertain voice.

INCOMPATIBILITY.

THE cleverly presented notes on common prescription incompatibilities, which are credited on page 293 to Dr. Hersmen, are an abstract of a paper read before the Pittsburg Medical Society and printed in full in the October number of the "Pittsburg Medical Review."

It is assuring to note the increasing interest which physicians appear to manifest in a subject of so much importance to the pharmacist, and we are sure that the publication of the notes will be welcomed by members of both professions.

Dr. Hersmen has succeeded in bringing together some notable instances of chemical incompatibility; but when he tells us that during his experience in the "apothecary business" he received a prescription calling for a mixture of potassium chlorate, sugar and sulphuric acid, we are disposed to question the accuracy of the statement. Fourth of July parties occasionally make requests for mixtures of the first two ingredients, to which sulphuric acid is added in drops from a glass rod after all arrangements have been provided for an explosive illumination; and in our own early experiments in chemistry we have been made duly acquainted with the remarkable effects of sulphuric acid on $KClO_3 + C_{12}H_{22}O_{11}$, but we have never had the unique experience of Dr. Hersmen, who instances the following as a combustible combination:

Potass. Chloratis..... 3i
Sacchar 3ss..... 3i

Triturate and acidulate with a drop or two of sulphuric acid and add water sufficient to make three fluid ounces.

The paper on the whole is one of much practical value, and is doubly welcome as coming from that profession which has too generally neglected a study of this important subject.

THE LEAGUE PLAN TO BE ENFORCED.

IN our news columns will be found a report of the special meeting of the Apothecaries' Guild of Boston and vicinity, which as our readers will recall is a branch of the Interstate Retail Druggists' League, having as its officers the presidents of the local associations in New England. At this meeting resolutions were adopted looking to the enforcement in the New England States of the League plan for the suppression of cutting and for regulating the prices of proprietary articles. It was decided, it seems, to ask all proprietary medicine manufacturers of the United States who approve of the plan to adopt and carry out its details. At the same time, an appeal was made for financial aid on the grounds that the proprietors will be greatly benefited by the enforcement of the League plan, while considerable expense will be incurred by the League itself in carrying out its provisions.

With the examples of San Francisco, St. Louis and Chicago before them failure in the present issue should be impossible. Nobody is more cognizant of the causes which led to the breakdown in these cities than President Canning himself, and it would therefore be a clear case of presumption for any person to question the wisdom of this recent move.

A convincing statement of the reasons advanced by the officers of the Apothecaries Guild for insisting upon the immediate enforcement in the New England States of the League plan is also given in the report of the special meeting, and we would suggest that the officers of every local branch of the League throughout the United States read this report with the care which its importance warrants. It remains to be seen whether the East can succeed in a movement which the West has tried and failed in with such disheartening results.

MRS. GRAND has assumed the part of literary demonstrator on venereal diseases, Beatrice Harraden teaches the psychology of phthisis, and Du Maurier lectures in "Peter Ibbetsen" on mania with delusions, while hypnotism furnishes the plot for that delightful book, "Trilby," over which all the world is laughing and weeping. The pathologist seems to have had it all its own way, but we at last have materia medica represented in a novel bearing the title "Witch Hazel." It is true that this drug is a little irregular, being affected more particularly by the homeopathic and eclectic physicians than by the "regulars," but it may nevertheless be taken as in some sort an indication of a tendency to allow materia medica to share with pathology the field of modern literature. Now that the way has been shown, may we not see the book stalls filled with

yellow-backed novels bearing such titles as "Vera Acacia, the Maid of Soudan," "Vesica Cantharis, the Fly Spanish Girl," "Thuja Occidentalis; A Western Wooing," etc.

AN advertising "expert" has gone wrong. From the claims made by the majority of such experts such a thing is impossible. But it may be that he was not a genuine bona-fide "advertising expert" (who shall decide this question?) and at all events he was not an American but an English "expert," which is of course "another pair of sleeves as we say in France." This one did some work for a number of London merchants and got orders, and had an office, and suddenly shut up his office and absconded, and is now much missed among the advertising drug trade of London. A letter was received in London from this "advertising expert" which was apparently posted in New York and therefore we mention these facts so that the trade in this city may be on their guard.

WE print in this number an interesting communication on the difficulties confronting those who seek to regulate the distribution and sale of proprietary goods by jobbers and retailers. The author of this communication, who presents his facts with such telling clearness of style, is a member of a firm which has made many notable efforts to confine the sale of their goods to retail druggists and whose experience seems to have taught them that the jobber is not always to be relied upon as a consistent defender of the interests of retail druggists. We commend the perusal of Mr. Hopping's letter to every person who is at all interested in procuring for retail druggists a fair margin of profit from the sale of proprietary goods and sundries.

A MAN who said his name was J. A. Borst, giving his address as 807 Bedford Avenue, Brooklyn, sold to Mr. Julius F. Shivott, druggist, 2869 Atlantic Avenue, Brooklyn, what was supposed to be Sulphate of Quinine. The druggist found that it did not answer the requirements, and upon investigation it was found to be Sulphate of Cinchonidia, which was crystallized to give it the appearance of Quinine. It was put up in a 5oz. decorated can of the New York Quinine & Chemical Works, which had been used before. Detectives are on the swindler's track and his arrest is likely to occur shortly.

THE colleges of pharmacy throughout the country report larger classes than ever before. Even where there have been such changes in the curriculum as might be expected to cause at least a temporary falling

off there has been no diminution reported in the number of matriculants. This is source of two-fold congratulation, for it indicates first, a prosperous condition of the commercial world, and second, a rapidly widening appreciation of the value of systematic collegiate education to the pharmacist.

PERHAPS if the retail druggist will stop "substituting," the manufacturer will stop selling his goods to keepers of dry good stores—perhaps—"Printer's Ink." Is it merely a coincidence that this paragraph appears in the same issue in which is printed in full Dr. R. V. Pierce's plan to do away with the middle man in advertising. A month ago "Printer's Ink" might have printed the paragraph, but would it not then have left out the final perhaps? Perhaps.

EDGAR U. WRIGHT directs our attention to a typographical error which occurs in the table of percentage solutions compiled by him and printed in this journal for October 10th on page 263. The error occurs in the fifteenth division of the first line, which should read 3vj instead of 3vi. Our readers should at once make the correction indicated in their journals.

What Our Subscribers Say.

"Too Valuable to do Without."

The American Druggist is too valuable for me to do without. L. N. Hilleary, M.D., Poway, Cal.

Compliments Our Style.

I must compliment you on your style of setting up the report of the Wholesale Druggists' Convention. Those headings—I suppose you call them—illuminate the account, make it interesting, readable and entertaining. You get a birds-eye view as it were, and you recollect what you are reading as you go along without effort. I for one would not have devoted the time to reading the account otherwise. Long accounts printed solid are very laborious to wade through, somehow. J. Milhau's Son.

183 Broadway, New York.

"A Great Help."

I think the American Druggist a great help to an enterprising pharmacist, and I could not do without it.

Mack A. Dashiell, Jr.

Indianola, Ia.

"Readable and Interesting."

I am very much pleased with your paper and find it very readable and interesting in its scientific and commercial features.

Fred Farrington.

North Tarrytown, N. Y.

"Of Great Value."

I am well pleased with your journal and consider it of great value.

C. W. Armstrong.

1223 Niagara Street, Buffalo, N. Y.

A Source of Profit.

Please continue sending paper. I find it very useful to me in many ways, and I have saved many a dollar by referring to your prices.

L. O. Grenella.

Asbury Park, N. J.



Quinine Solution for Hypodermic Use.—Antipyrin possesses the property of making quinine salts more soluble, and Marty proposes to make use of this in making a concentrated solution of quinine for subcutaneous injection. He proposes the following formula: Quinine monochloride 3 grammes, antipyrin 2 grammes, distilled water 6 grammes.

Sodium Salicylate for Extracting Volatile Oils.—Lenz has discovered (Deut. Zeit. f. Anal. Chem.) that sodium salicylate in aqueous solution possesses the property of extracting from plants their volatile oils, even when the latter are not soluble in the former. The property may find useful application in the separation of volatile oils in distillation, the yield being decidedly greater.

Insoluble Gums Rendered Soluble by Hydrogen Peroxide.—It is stated (Bayr. Ind. u. Gewerbebl.) that if insoluble gums are treated for 3 or 4 hours at from 80° to 100° C. with solution of hydrogen peroxide they will become soluble in water. The proportions given are: gum, granulated, 220 g.; water, 1,000 g.; hydrogen peroxide (12 vol. p. c.), 50 to 60 g. A larger proportion of hydrogen peroxide solution will render the gum completely soluble. Tragacanth is similarly affected.

Iodides of Narceine.—The blue iodide ($C_{20}H_{21}NO_3$)₂, $8H_2O$, according to the British and Colonial Druggist is formed when narceine is treated with an aqueous solution of iodine. This is easily soluble in water, slightly so in alcohol; insoluble in ether and chloroform, and melts at 176°–177°C. The red iodide ($C_{20}H_{21}NO_3$)₂ results on treating narceine with alcoholic solution of iodine. It melts at 181° and is insoluble in water and alcohol. Both iodides can be converted into the alkaloid by treatment with NaOH.

To Relieve the Thirst of Diabetics.—Pilocarpin may be administered in solution or in pill form. The pills are best prepared by the addition of glycerin and gum arabic. Each contains gr. $\frac{1}{3}$ of pilocarpin nitrate.

For the solution the following formula is given:

Pilocarpin nitrat.....	gr. $\frac{1}{3}$
Spirit vini dilut.....	℥ss.
Aque.....	3j.—M.

The tongue is to be moistened with 5 or 6 drops of this solution four or five times daily.—*Nouv. Remedes*, No. 11.

A New Process for the Conservation of Fresh Milk.—Large cylinders are partly filled with the milk, after which oxygen is forced into the cylinders at a pressure of two atmospheres. This procedure entirely sterilizes the milk, which may then remain for months in the cylinders without undergoing any change. It can be sent on long voyages with perfect safety. When it is wished to use the milk the gas is allowed

to escape, and the contents of the cylinder are then found to be just as sweet as when first put in.—*Lyon Med.*, July 8, '94.

Eczema of the Ear Canal.—Remove the epithelial scales by injecting diluted Van Swieten's solution and dry with absorbent cotton wrapped around the end of a probe. Fill the canal then with 15 grains of iodol, dissolved in one ounce of alboline.

Introduce a pledget of cotton to retain it as long as possible. Renew this dressing morning and evening so that the affected parts are always in contact with the remedy. At the end of fifteen days the eczema will be cured. Then wash out the canal well and leave off treatment. Lanoline and aboleine are preferred to vaseline, as this latter is often impure and irritating.

Trichloroacetic Acid in Obstinate Epistaxis.—Dr. Kossolino. The author recommends for the treatment of obstinate epistaxis *Vratch* a 3 per cent solution of Trichloroacetic acid, instead of the customary iron chloride. The end of a probe is wrapped with cotton, and this tampon impregnated with the said solution; and with this all the interior surface of the septum is painted. A 20 per cent. cocaine solution may be added, to overcome the intense burning.

The hæmorrhage is said to cease immediately; and the advantage of this treatment over the traditional treatment with ferric chloride, is stated to consist in the antiseptic and antiputrescent effect of the acid.

The Bismuth Subnitrate of Commerce.—M. P. Carles warns pharmacists in the *Bulletin de la Société de Pharmacie de Bordeaux* against the partiality that they accord to light bismuth subnitrate, and reminds them that in order that the heavy bismuth subnitrate, that is to say, the normal, may exert all its efficiency, it is necessary that it should be administered only in a state of intimate division. The light subnitrate contains a certain quantity of carbonate, which sufficiently explains the relative lightness of the product and its poverty in nitric acid. When the therapeutic action of bismuth subnitrate is closely studied, it is evidently not a matter of indifference that the proportion of nitric acid is small.

Price No Guarantee of Excellence.—A few days ago a sample of hydrogen dioxide of English manufacture was analyzed in comparison with a well-known American brand. Four ounces of the English preparation cost one dollar, while the same quantity of American article costs about thirty cents. The results are interesting:

	Volumes of O.	Degree of acidity.
English.....	5.6	36.0
American.....	10.0	2.4

A sample of an American article which was ten volumes in strength in February last, and had been standing on the labora-

tory table all summer, was found to have been reduced to eight volumes, showing, therefore, excellent keeping qualities.

Bismuth Loretin.—The antiseptic action of loretin depends upon the gradual separation of iodine, which in the nascent state has considerable antiseptic action. Loretin forms salts with metals, and in these new bodies this property of the separation of nascent hydrogen is in some cases retained. This holds good with bismuth loretin which possesses also the astringent properties of bismuth. The salt, even in large doses, does not produce symptoms of poisoning in animals, but after its internal administration iodine appears in the urine. As an application to chronic ulcers and specific lesions of the skin it was found extremely useful. Healing took place rapidly, and frequent dressings were found unnecessary.

The Supposed New Gas in the Atmosphere.—The supposed new gas in the atmosphere brought before the British Association at Oxford recently, by Lord Rayleigh and Professor Ramsay, which is said to be somewhat heavier than nitrogen, but otherwise possessing the same chemical properties, though its spectrum is said to be slightly different, is looked upon by Professor Dewar, of the Royal Institution, as being probably an allotropic condition of nitrogen gas, induced by passing electric sparks through the air. This view is the more probable as it would account for the increased density, and the very minute quantity obtained. It has long been known that the other constituent of the atmosphere, namely oxygen gas, is affected in a similar manner, being in the same circumstances transformed into a denser quality of oxygen, known as ozone; but in the case of oxygen the chemical properties of the gas are heightened extremely by this treatment, while with nitrogen its inert quality remains even after the increase of density.

Confection of Phosphorus.—Dr. Hartz proposes the following formula as yielding a stable and satisfactory preparation: Seven ounces of the best wheat flour, 1 ounce of Armenian bole, and 8 ounces of glycerin are stirred together in a tin kettle of the capacity of half a gallon. A solution of 4 scruples of salicylic acid and 4 drams of sodium phosphate in 2 fluid ounces of water is added, and then 14 ounces of boiling water are admixed, with constant stirring. The whole is now heated until a thick, uniform paste is formed. Three drams of phosphorus in sticks are then covered with the hot paste, and by rapid but careful stirring the phosphorus is distributed in about three minutes in a manner that no phosphorus granules will any longer be visible to the naked eye. Two ounces of mutton tallow are then introduced, the whole is covered, and when the tallow is melted, again cautiously stirred. The mass is apt to ignite during this last operation unless this be done quickly and with care. Inexperienced persons will therefore do well to wrap a cloth around their hands.

Species of Strophanthus.—An illustrated monograph of this genus has recently been published by Dr. Franchet in the *Nouvelles Archives du Muséum*. *S. boivini*, H. Baill., *S. tholloni*, Franch., and *S. courmonti*, Sacleux, are remarkable for not having tailed appendages to the corolla lobes, which in the first named species are quite obtuse, while in *S. bartersi*, Franch., *S. con-*

goensis, Franch., they scarcely exceed $\frac{1}{4}$ inch; in *S. parviflorus*, Franch., and *S. amboensis*, Engl. and Pax., and *S. ogovensis*, Franch., they are about $\frac{1}{4}$ inch, and in *S. bracteatus* they reach a length of nearly six inches. *S. tholloni* has the long-tailed anthers of the *roupellia* section, and long tapering scales in the throat of the corolla, nearly equalling the lobes in length, and the other species present every gradation in length and shape of the corolla scales and in the length of the awn of the seed, showing that the species, although exhibiting great variation in the shape and size of the flowers, form a closely connected series. Dr. Franchet points out the curious fact that there is a relation between the glabrous character of the seeds and the length of the tail or appendage which crowns the connective of the anthers. Guided by this relation, Dr. Franchet concludes that the only two African species thus furnished, viz., *S. gratus* and *S. tholloni*, are the sources of the smooth *strophanthus* seed of the Gaboon. This monograph forms a most valuable addition to our knowledge of the genus, the species of which, as now enumerated, have reached the number of thirty-five.

Phosphated Cod Liver Oil.

M. Marfan according to the Pharmaceutical Journal recommends the following formula for this preparation, the product being described as palatable and perfectly tolerated:

	Grammes.	(75 grains)
Tragacanth.....	5	(5 fl. ounces)
Solution calcium lactophosphate (5 per cent.).....	150	(5 fl. ounces)
Syrup calcium lactophosphate (5 per cent.).....	3.0	(11 fl. ounces)
Cod liver oil.....	500	(16 fl. ounces)
Tincture of Citron.....	20	(25 minims)

The tincture of citron of the French Pharmacopoeia is made from the fresh peel one part to two of alcohol at 80 B°.

The Influence of Sunlight upon Bacteria, and the Self-Purification of Rivers.

H. Buchner (Hyg. Rund., 1893; p. 1133) finds that in the case of the typhoid bacillus, the bacterium coli, the bacillus pyocyaneus, and the cholera bacillus suspended in main water, it was unquestionably determined that the action for two hours of direct sunlight positively killed the bacteria mentioned; even the action for two hours of diffuse light was followed by a decided diminution in the number of germs. Similar results were obtained by experiments with nutrient gelatin. It was shown that after 1-1½ hours' action of direct, and after five hours' action of diffuse, light, the above named organisms were no longer capable of development.

Regarding the influence of the height of the water strata, from experiments made in the Starnberg lake to a depth of 3.1 meters, B. believes he is justified in concluding that, in quite clear water, the action of light extends to but a depth of about two meters: e. g. 4½ hours' exposure at a depth of 1.6 meters resulted in the non-development of the exposed germs.

Very interesting results were obtained from experiments with flowing water. A day and night variation in the germ content of the river water, dependent upon the sterilizing influence of light, was determined with certainty; in the evening and first night hours, a minimum; in the morning and first day hours a maximum was observed.

The National Formulary.

At the regular meeting of the Kings County Medical Society held in Brooklyn, Tuesday October 16, a committee of the King's County Pharmaceutical Society was present by invitation to discuss the merits of the preparations of the National Formulary. Especial attention was given to certain compounds in general use by physicians and a most interesting programme was carried through. Dr. E. H. Bartley led off with a short paper explaining the preliminary work of the society giving a succinct history of the manual itself. He stated that he had met with most excellent results from the compounds of the National Formulary which he had used in practice. The digestive compounds, including the various forms of malt; pepsin and pancreatine, were spoken of in very favorable terms, the effect of N F extract of malt on bread was demonstrated, and Dr. Bartley advised the use of the preparation in preference to the liquid malt extracts of the market. He exhibited a specimen of elixir buchu made after the process of the National Formulary and referred to it as an example of particularly good work, pleasant to the taste and possessing good keeping qualities. Among the other samples shown were syrup of hydrochloric acid, elixir aromatic, elixir anise, elixir curacao, elixir liquorice, elixir liquorice aromatic, elixir taraxacum, compound. Prof. Luther F. Stevens addressed the meeting as chairman of the Committee on Formulary of the Kings County Pharmaceutical Society. He gave an account of the progress which had been made in formulating elegant compounds and emphasized the fact that all of the formulas quoted had stood the test of time.

The New Anti-Toxin Treatment.

Prof. Behring, the discoverer of the new cure for diphtheria, began a series of experiments with guinea pigs, in 1890, and started from the principle that it is more important to sterilize the blood and render it secure from poisonous virus than to destroy bacteria. In this he differed from his master, Prof. Koch. His view is borne out by the fact, now fully established, that bacteria are not indispensable to the production of diphtheritis. The liquid in which they have been cultivated suffices even though absolutely free from bacteria, and, on the other hand, the bacteria of diphtheritis have been found in the blood of perfectly healthy persons, to whom they cause no inconvenience. This proves, he said, that the bacilli of diphtheritis exude a poison which is as deadly as themselves, and it was to neutralize this that he directed his efforts. He found that animals gradually inoculated with diphtherial bacteria enjoyed complete immunity from the disease, even if attempts were made to communicate it artificially. In the course of experiments he further discovered that the blood serum of animals thus inoculated, if injected into the organism of other animals, rendered them proof against all attacks of diphtheria. Serum is the watery transparent fluid which forms on the surface of blood after coagulation. The serum of animals thus inoculated contains, therefore, an antidote to diphtheritis poison, and the best serum obtainable is that extracted from the blood of healthy horses which are well fed and have no work to perform.

Production of Soda and Chlorine.

The struggle between the Le Blanc and Solvay processes for the manufacture of

alkali is now likely to be participated in by a third competitor for favor, and while the two older processes excel each other in the economical production of chlorine and soda respectively, the new electrolytic process originated by Mr. H. Y. Castner of the Aluminium Company, Oldbury, Birmingham, seems likely to prove a dangerous rival in both respects. It is stated that recent experiments have resulted in the production of solutions which on evaporation yielded a solid caustic of 99.5 per cent., while the gas produced contained 95 to 97 per cent. chlorine. The essential feature of the process appears to be the employment of a moving body of mercury, which completely separates the products of electrolysis and takes the place of a diaphragm, the amalgam formed being decomposed as rapidly as it is formed. According to the *Times* report, which is not very clear, the cells employed are divided into three compartments, and are capable of being continuously rocked or tilted so as to give the contained mercury a flowing motion from side to side. The two outer compartments contain the carbon anodes and the alkaline chloride solution; the middle one an iron cathode and the caustic solution. The saline solution is continuously circulated through the outside compartments, and, after being electrolyzed, is returned to saturators, where it is recharged with salt. The electric current liberates chlorine gas, and at the same time sodium amalgam is formed and subsequently decomposed. The process is continuous and it is said that the electrical efficiency is 88.9 per cent. No hypochlorites are produced, and the electromotive force required for each cell is low. With thirty cells the daily output is stated to be 1200 lbs. of pure caustic soda and 1000 lbs. of chlorine, with an expenditure of 110 i. h. p.

Test for Bile Pigment in the Urine.

Henry Roc proposes the following: A portion of the urine is poured into the test-tube, which is held inclined. Two to three Cc. of a solution consisting of ten parts of official tincture of iodine mixed with 90 parts of alcohol are then poured in with great care, so that the iodine mixture overlies the urine, but does not mix with it. Almost instantly a grass-green ring will be seen to develop at the point of contact of the two fluids. If no bile pigment is present, the ring will be either colorless or of a light yellow color. This is said to be the most delicate and reliable test for bile pigment which has yet been proposed.—*Am. Med.-Surg. Jour.*

The Treatment of Hæmoptysis.

W. Duncan, L.F.P.S.G. (*Med. Times and Hosp. Gaz.*, 1894; XXII; p. 511), states that in all cases of hæmoptysis the aetiology should be inquired into and treated if found. Absolute rest of the vocal organs should be enjoined, and the body kept in a semi-recumbent position. Where the hæmorrhage is not severe, gallic and tannic acids or acetate of lead should be given at regular intervals. Besides this, turpentine may be inhaled by pouring some upon boiling water. Cardiac stimulants should not be given unless they are absolutely indicated. The application of cold to the chest by means of ice, etc., is not to be recommended. Cold causes more or less anaemia at the place of application. The cutaneous vesicles are emptied of the amount of blood they previously contained, it being driven into other parts, and if into the lungs,

where the bleeding is going on, it will only increase the haemorrhage. It would be more rational to apply heat to the chest wall, or counter-irritation by sinapisms or turpentine, thus bringing the blood to the surface and diminishing to some extent the quantity of blood in the lungs, and in that way assist in arresting the haemorrhage.

Blaschko recommends gallic acid and ergotin in severe haemoptysis, thus:

Gallic acid.....	aa 1 part
Ergotin.....	
Distilled water.....	aa 3 parts
Syrup althaea.....	

Of this a teaspoonful is given every two hours. If there is much irritant coughing, the althaea syrup is replaced by poppy syrup, and then a teaspoonful is given hourly until relieved.

Ergotinine is recommended as more prompt, sure and constant than ergotin. The dose is $\frac{1}{16}$ to $\frac{1}{8}$ of a grain. An opiate will often quiet the patient's alarm and also be of good service by tranquillizing the circulation.

The Use of Tincture of Gualac as a Reagent.*

By Prof. Ed. Schar.

From an experience covering many years the author looks upon this tincture as an invaluable reagent, though one whose indications are often misunderstood. After reference to Schonbein as the first to use the tincture as a reagent the author proceeds to a consideration of the blue substance developed when gualconic acid, a constituent of gualac wood, comes into contact with ozonising substances and which is termed gualconic acid ozonide. The blue color is not permanent, easily losing oxygen and becoming colorless. This also occurs in the presence of acids and alkalies and likewise from heating. Through further action of the oxidizing substance, however, a blue color is continually developed.

Acetic acid is the only acid that does not interfere with reaction. An excess of the tincture is objectionable. A tincture made from the purest obtainable resin and of 1 to 50 or 1 to 100 strength is the best to use; the tincture made from the wood containing tannin and other oxidisable substances. Gualconic acid is soluble in alcohol, ether, chloroform, etc., the resin is conspicuously so in sodium salicylate and still more freely soluble in chloral hydrate solution, in which latter the acid is especially soluble. A drop of the chloral hydrate solution on a drop of paper shows a clear blue whole, a drop of the alcoholic tincture shows greenish by comparison. The tincture must be kept in the dark. When used in alcoholic solution the ozonide goes into solution, while if the tincture is added to water the ozonide is suspended and is scarcely visible until alcohol is added, when a vivid blue color makes its appearance.

ITS USES.

It is useful first as a reagent for ozone and for that whole class of oxygen compounds which give the reaction of ozone (ozonides). To this class belong nitrous acid, hypochlorous acid, metallic super oxides, salts of the noble metals and ferric and cupric salts, substances which do not yield a blue color with tincture of gualac (which are not ozonides) are, for instance, nitric acid, hydrochloric acid and hydrogen peroxide. The coloration produced by chlorine and bromine is due to the nascent

oxygen. In all other cases, however, nascent oxygen fails to produce this blue color. An ozonising influence is also exerted by plant ferment, or enzymes, *Phytolacca decandrea* secreting such a ferment in large quantities.

The second use of the tincture has in view the transfer of oxygen in the shape of ozone, for instance with hydrogen peroxide or certain oxidized terperies with extract of malt. Here is where the most errors arise. Hydrogen peroxide alone is wholly without effect on the reagent, only coloring it in the presence of ozone bearers such as ferments, the coloring matter of blood, the oxides of iron and lead and finely divided platinum. Hydrogen peroxide itself is therefore not an ozonide. It is especially noteworthy that blood spots, no matter how old, color gualac solution a most intense blue in the presence of either hydrogen peroxide or certain essential oils.

The third use of gualac as a reagent is in the recognition of copper compounds on the one hand and of cyanogen compounds on the other. While copper salts turn gualac solutions blue they do not do this in a dilute solution save in the presence of a cyanogen compound, hence this reaction can be used to detect either copper or cyanogen compounds.

A Physician on Incompatibilities.*

A certain amount of chemistry, medical chemistry, is essential to the physician, and is not always to be gotten in books. He who would ignorantly combine sulphuric acid and a carbonate would certainly need to restudy his chemistry. I wish only to point out a few principles and some of the errors in prescriptions which are committed daily.

MIXTURE OF SOLUBLE SALTS.

Two soluble salts in solution which can by decomposition form and throw down an insoluble salt, such as an iodide, a chlorate or a bromide and sulphate of morphine or strychnine, etc., etc., should never be combined, unless the compound is desired for its therapeutic effect, such as acetate of lead and sulphate of zinc, or lead and opium wash, etc. A tyro in pharmacy might filter such prescriptions and thereby thwart your object. A dangerous habit is to prescribe an alkali and an alkaloid, always bad pharmacy. I have seen prescriptions of the following kind: Cocaine hydrochlorate, glycerole of pepein, syrup and lime water, which is also bad pharmacy.

CAUTIONS TO PRESCRIBERS.

Glucosides, such as *assantoin*, *colocynthin*, etc., should never be prescribed with free acids.

Tannic acid is incompatible with alkaloids, albumin, gelatin, etc.

Iodine and iodides should not go with the alkaloids.

Death has been caused by the combination of iodide of potash and sulphate of strychnine.

Iodide of potash should be prescribed with no drug except iodine and bichloride of mercury; with the latter it forms a double salt, biniodide, but as it is soluble in the excess of iodide it is not objectionable.

Bichloride of mercury is incompatible with almost everything. As a rule it should be prescribed in simple syrup, it being incompatible even with compound syrup of sarsaparilla, as it forms calomel.

Syrup of squills is incompatible with am-

monium carbonate but not with ammonium chloride.

MERCURY AND IODINE.

One of our South Side druggists, just at the beginning of his apprenticeship, recently received a prescription for mercury (liquid) and iodine (resublimated), with instructions to triturate the two and add other ingredients. The drugs fused with an active emission of smoke or fumes, leaving the residue a hardened mass to be broken up with the pestle.

INCOMPATIBLE PRESCRIPTIONS

Many members of the medical profession daily write prescriptions which are incompatible. If a little judgment and forethought were exercised there are very few but would know better. The following is an illustration:

Tincture ferri chloridi,
Potassii chloratis,
Syrupi tolutani,
Mucilaginis acaciae.

In this mixture the acacia, acid and iron are incompatible.

The following prescription was a favorite for years and some physicians are still writing it. It is a very good one to vex and make trouble for the druggist:

Ferri pyrophosphatis,
Aque bullientis,
Syrupi singiberis,
Tincture cinchonae compositae,
Acidii phosphorici diluti.

Unless prepared after a special process this will form a gelatinous mass.

On a certain occasion when I was in a drug store the following came in:

Mentholae, 3 ss.
Aque ammoniac,
Colloidi,
Tincture iodi aa f 3 vss.
Ft. lin.

In place of a liniment a plaster is the result.

During my experience in the apothecary business I received the following:

Potassii chloratis,
Sacchari aa 3 i.

Triturate, and acidulate with a drop or two of sulphuric acid and add water sufficient to make three fluid ounces.

If the instructions for preparing this are carried out active combustion is bound to result.

CORROSIVE SUBLIMATE AND STRYCHNINE.

Occasionally a physician may order a solution of strychnine sulphate and bichloride of mercury, aa, gr. 1 to the drachm. If the pharmacist uses a solution of bichloride of mercury, in which ammonia is a usual ingredient, the mixture becomes semi solid, caused by the ammonia used to hold the mercury in solution. A common mistake is as follows:

QUININE, LIQUORICE AND SULPHURIC ACID.

Quinine sulphatis gr. x
Acidii sulphurici aromatici q. s.
Extracti glycyrrhizae fluidi f 3 i.

The acid in this is incompatible with the liquorice. It precipitates and renders tasteless the sweet principle. A better method is to suspend the quinine in the liquorice.

I have filed the following a number of times, but it is decidedly unsafe:

Potassii permanganatis 3 ss.,
Glycerini,
Aque destillatae aa. f 3 iiii.

Not long ago I saw the following:

Morphine hydrochloratis gr. ii,
Ammonii chloridi 3 ii,
Tincture aconiti ʒxx,
Aque camphorae f 3 ii.

The camphor water should be replaced by some other vehicle, otherwise there will be a deposit formed.

Finally, "as directed" is a perfunctory direction often added to prescriptions. As the memory of the nurse or patient is likely to be weak, errors may be easily made under such lax directions.

* C. C. Hersman, M.D. in *Pittsburg Medical Review*.

*Read before the Verein Deutsche Naturforscher.

A Model Pharmacy and a Philosophy of Dispensing.*

"This is Mr. Henderson," said my new governor, and turning slightly towards the person indicated, added, "Mr. Henderson, Mr. Wilson, who will assist you in the dispensing; I hope your association will be mutually helpful and agreeable." And then he turned to the front counter and left us.

This was my introduction to one of the most singular characters I met with during the somewhat migratory period of my assistantship. At this time I had just qualified, and the post of assistant dispenser with Messrs. Mark & Lerne, had been secured for me by the influence of my kind old master in the suburbs, with whom had begun my pharmaceutical career.

The old man had told me that I should find the arrangements of Mark & Lerne's dispensary as nearly perfect as anything of the kind could be, and Mr. Henderson, by whom in great part they were designed, a man well worth knowing. "Though still young," he said, "Henderson is a perfect master of his craft, a man of large and liberal, though peculiar ideas, and possessed of a manipulative skill and ingenuity I have never seen surpassed."

With these words still fresh in my mind, I examined my new surroundings with more than ordinary interest, and the first thing that struck me was that the designer of the dispensing department had not been stinted for room. The shop appeared unusually spacious, though I found out afterwards that this was as much owing to the judicious arrangement of the fittings as to the actual dimensions of the space available.

THE DISPENSING DEPARTMENT.

The dispensing department measured about 18 feet (the breadth of the shop) by 6 feet, though at one end it was slightly narrower owing to the oblique position of the counter.

As one faced the counter, a small table and stool were behind on the right, the sink in the left corner, while immediately at the back, in a tiled alcove, stood a small gas stove and drying-cupboard. Between the stove and the sink on one side, and the table on the other, was room for cupboards in which were arranged liquid and solid poisons respectively. I say "arranged," because nothing was merely "stocked" in this department, but invariably included under some classification. There were two other cupboards at the right end of the department, and a third attached to the door on the left, which opened upon the passage into the house and store-rooms. It has often struck me as strange that this was the only shop where I have seen a cupboard built upon a swing-door; generally the space this occupies (say, 6 feet by 2½ feet) is entirely lost, save perhaps for hanging handbills or cloths. Of course the door had a self-closing adjustment that prevented displacement of bottles, etc., when it fell to.

The table was used for copying prescriptions, writing labels, and generally for the scriptorial part of the work. The stool was evidently not designed for lounging in; it was nothing more than a cylindrical or slightly conical piece of hard wood, hollowed at the top. Subsequently I learned that it had another function: In the middle of the floor, towards the right end of the department, was a circular trap-door, which, when removed, disclosed

a hole with an iron or metal bottom; into this the stool fitted, and as the metal base was really the top of a pillar sunk into the foundations of the building, a mortar placed on the top of the stool, (and kept in situ by the hollowed upper surface) could be vigorously used for pounding up the most refractory resins, woods, etc., without the risk of bringing down a shower of shop-rounds by the vibration, or the inconvenience of rendering conversation at the front counter impossible.

THE DISPENSING COUNTER.

The dispensing-counter, being 14 feet long, allowed of complete arrangements for two dispensers, without the necessity of their interfering with each other. There was a gas-supply about two inches above the counter, with a T-piece carrying tubing on one side to a Bunsen, and on the other to a flat Argand or solid-flame burner, on which a small dish could be conveniently heated. At a suitable level, higher up the screen, were two sealing-jets, the heat from which was utilized, by means of a very simple stand, fitting over and held in place by the burner, for keeping two pint flasks of distilled water just below boiling-point. As this water was taken out for the rapid preparation of such solutions as boric acid, salicin, and the like, for rubbing down extracts or similar operations, it was replaced by a fresh supply of cold. A small water-motor, which could be driven by the sink-tap, worked a shaking-box, in which we usually prepared chloroform and camphor water, certain emulsions, and so on.

There was just one other device—for keeping graduates—which, though not peculiar to Messrs. Mark & Lerne's, may be worth mentioning. Instead of having these appliances washed by the boys and set on shelves or the counter (as is generally done), they were placed after use on an arrangement of upright water-jets, similar to that used on American syrup-bars. A few minutes' flow of water sufficed to clean moist measures, but occasionally a few sweeps with a brush (kept for that sole purpose) were added. When clean, the glasses were not wiped, but at once placed bottom upward in a rack having a tin tray below to catch any drippings. The rack consisted of a shelf, somewhat thinner than usual, having a number of slots cut into it just wide enough to admit the thin end of the conical graduate, where the foot is attached; it was in the latter, of course, that the measures hung when in the rack.

THOROUGHLY CLASSIFIED.

One of the more immediately conspicuous features about Messrs. Mark & Lerne's dispensing department which especially commended itself to any new assistant, was the thoroughness already referred to. Henderson had a kind of mania for systematizing everything. The cupboards were in apple-pie order, the innumerable bottles, jars, etc. (and a very large stock was kept), being arranged under such heads as "Arsenicals," "Mercurials," "Alkaloids," "Non-alkaloidal Principles," "Ferments," "Crude Drugs," and so on. The effect of this was, of course, that it was possible to ascertain at a glance, in cases of doubt, whether any article required for a prescription was in stock.

Perhaps it should be added that the dispensary bottles, etc., were always filled up when new stock came in by the dispensers, and never by one of the juniors or apprentices.

Prescription-books were used in a manner then new to me, and, I believe, far

from generally known. From an examination of the old books of the firm (which had been in the same place many years), Henderson had determined the average number of pages required for each letter of the alphabet; each prescription-book was made into an index book from these data, and every prescription was entered in that part of the book which the name it carried required. An extra column was ruled in each page immediately after the usual red line, and in this prices were entered so that the income from the week's dispensing could be easily totalled up.

But though these details are interesting and necessary to give the reader an idea of the precise and methodical character of Henderson, they are not intended to form the principal subject of these lines. It is rather my design to restrict these observations to his views on what I have called the philosophy of dispensing.

I had not long worked with him before I discovered that in certain particulars my senior seemed to depart widely from the general preciseness of his conduct. Although, for the most part he was scrupulously exact, to the verge of weariness, in detail he would often proceed with a freedom that seemed to me to border on recklessness.

STOCK PRESCRIPTIONS.

It was, for instance, his custom to make at least two dozen of any pill ordered in a prescription, and those not immediately required were stocked in chip boxes, on the lid of which was written the name of the patient, the ingredients, and the amount in each pill. The chip boxes were kept in square tins, and, of course, classified—one tin containing pills with only one ingredient, or a single compound official pill; another, pills with two ingredients; a third, those containing mercurial combinations, and so on. The compounds of mercury were again subdivided into hyd. c. creta, calomel, and blue-pill combinations.

During the course of a year these reserve pills would naturally tend to accumulate enormously; but, as a matter of fact, they did not, owing to Henderson's peculiar method of dealing with them. If a prescription came in ordering, say, a mercurial combination, the boxes would be referred to, and if a quantity of that formula happened to be made, well and good; if not, it would frequently happen that one of the large variety of formulæ on the chip boxes would approximate to that ordered, and the pills contained in this would be unhesitatingly dispensed. Thus, for instance, I have seen pills containing ext. coloc. co. sent out when pil. coloc. co. was prescribed, and a combination of calomel 2 grs. with ext. aconiti ¼ gr. (of which we happened to have a good supply) substituted in an emergency for simple calomel 2 grs.

Then, again, our ½ gr. calcium-sulphide tablets figured as ½-gr., ¼-gr., or whatever was required.

ON PERCENTAGE SOLUTIONS.

The same species of freedom was exercised in other directions. Percentage solutions were rarely, if ever, calculated out, but an even approximate amount of the salt used. An ounce of 2-per-cent. cocaine solution would be quickly prepared by weighing out a "full 8 grs." of the hydrochlorate, shooting it into the phial, and filling up with aqua dest. Similarly the stock dispensing-solutions of mag. sulph., ammon. carb., etc., though always made by Henderson himself, were prepared from weights of salt only nearly approxi-

* From the *Chemist and Druggist*.

mate to the exact amount. For 3 pints of mag. sulph. solution (1 in 2) 33 av. oz. of salt were taken; for a similar volume of sol. ammon. carb. (1 in 8), 8½ av. oz., and so on.

I was just fresh from a course of exact scientific training, and mentally weighted with the responsibility of recent qualification. The utmost exactness in compounding medicines seemed to me an important pharmaceutical ideal, and I had been accustomed to read with reverential respect the papers on the P. B. alkaloidal liquors and on the preparation of percentage solutions designed to lead the student through the shoals and hidden rocks of complex arithmetical computation to the safe harbor of precision and definiteness.

One quiet evening, therefore, I opened a conversation on the subject with my senior, and, having referred to the questions above mentioned, expressed my surprise at the manifold contradictions I had noticed between the theory and practice of pharmaceutical dispensing at Messrs. Mark & Lerne's.

THE PHILOSOPHY OF DISPENSING.

Whereupon Henderson delivered himself of a discourse upon the philosophy of dispensing, which, so far as I remember, took the following form:

"You see, my dear Wilson," he said, leaning back in his chair, and contemplatively watching the huge clouds of smoke, which rolled about the room, "one's views of such matters depend upon the stage of pharmaceutical evolution attained to. I regard these stages as, roughly, three in number, though of course, they pass by fine gradations almost imperceptibly into each other.

"The first period is marked by a spirit of irresponsibility, which occasionally originates in entire ignorance, but more frequently is prompted by that little knowledge which experience has so often shown to be a dangerous thing. Quite failing, from mere thoughtlessness, to grasp the seriousness of their calling, dispensers in this stage of development (if, indeed, the condition be not antecedent to all true mental unfolding) resort to methods which would be much more surprising were they less common. If a prescription for a mixture containing, among other things, say, *sodii nitris*, fall into the hands of an individual of this class, and the salt named be not forthcoming from the drug-sundries cupboard, *potassi nitras* will be light-heartedly substituted, under a vague impression that *potassium* and *sodium* salts, *nitrites* and *nitrates*, are of practically identical therapeutical value. It is the same individual, or his peer in psychological make-up, who finding that a few grains of *potassii iodidum* in a mixture with spirit of nitrous, either behave in a peculiar and chromatic manner, gallantly tries the effect of a different order of admixture—which, he has a hazy notion, will carry him over most dispensing pontes asinorum—and finally solves the still obstinate difficulty by the simple expedient of altogether omitting the recalcitrant salt. You smile incredulously; both these instances were drawn at random from recollections of actual experience, and were the devices of acknowledged 'smart' dispensers.

THE SCIENTIFICALLY ACCURATE STAGE.

"The second stage is commonly the result of some amount of scientific training, and perhaps a course of study under the distinguished pundits of pharmaceutical learning, who adorn our increasing list of

technical colleges. The newly-fledged graduate from these institutions is oft well-nigh oppressed by the gravity of his position, would welcome as a real advance the introduction of the chemical balance for weighing doses of calomel, and has doubts as to the defensibility of using, in the varying temperatures of the pharmacy, measures of volume, graduated to the uniform standard of 60 degrees F. It is these men who grapple so resolutely with the inconvertible factors of our measures of weight and volume, elaborate mathematical formulae for the preparation of exact percentage solutions of boric acid, and publish papers to demonstrate how one ounce of ointment can be turned out containing 10,000 parts of resorcin mixed with 90,000 parts of fatty basis.

THE PRACTICAL STAGE.

"As experience broadens, as the real significance of facts appears clear, and things begin to exhibit their true relations, this position is gradually left behind, and the dispenser enters upon the third—according to my view, the last—of the stages of development. And one peculiarity of his conduct will now be that it will superficially bear many resemblances to that of the individual who is still in the first period. He will, for instance, cease to pay that strict attention to the exact coincidence of the bottom of the meniscus and the mark on the graduate which in the second stage he scrupulously adhered to, and he will no longer feel it necessary to calculate to the third place of decimals the weight of *hydrargri perchloridum* required for a quart of 2-per-cent. lotion. Yet the spirit which prompts action in the two stages is entirely different.

"The enlightened and delivered dispenser, having traveled so far along the line of progress and evolution, has learned to estimate the modern remedial treatment of disease at its true value. He knows that the world still awaits the healer who shall tell diseased and suffering mankind what health is and whence it flows—that medical science has made a fetish of disease and dances ever around it, without anything more than the suspicion of the existence of a great positive force of health. Has it not been well said that there has probably never been an age or any country in which disease has been so prevalent as in England to-day?—and there has certainly never been an age or country in which doctors have so swarmed, or in which medical science has been so powerful in authority, in learning, in apparatus.

A WASTE OF LABOR.

"Where, then, is the value of your 2-per-cent. boric lotions, calculated to a nicety, and of your vain efforts to make official alkaloidal solutions of exactly 1-per-cent. strength? Your labor is all wasted—your finical strivings after exactitude worse than foolish. The action of crude drugs upon the animal system is practically unknown, save in certain broad features, and limits of dosage are little more than expressions of the extent of variation in the therapeutical effects believed to be produced by their administration. It is still true that medicine is empiricism, and every dose an experiment, and the slight variations which, for the sake of convenience, you or I may make in a doctor's prescription are either of no importance whatever or as likely to be surprising improvements as to militate against the intended effect.

"What do you say? That it is surely the duty of the dispenser to carefully and exactly follow out the directions of the medical man in order that the desired results may be ensured." I reply that the medical man cannot predict the action of his own mixtures, pills and applications; and, apart from this, the dispenser is a reasoning creature (even though he be chained to the counter, and put up medicines at store prices), and cannot, if he would, interpret with mathematical accuracy and scientific precision the prescriptions of a 'healing art' which is moving hopelessly wide of his own aim by methods the reverse of the truly scientific."

At this point the hour of midnight and the night-bell interrupted my eloquent senior simultaneously, and, leaving Henderson to work off a batch of croton-oil pills, I went thoughtfully to bed.

Food Colors and Food Preservatives.*

BY HENRY LEFFMANN, A. M., M. D.

The constant attacks made by sanitary authorities on the use of mineral substances in food has tended to decrease the use of them and it is comparatively rare that we find arsenic, copper or lead colors in food. Among the substances long used and commonly regarded as harmless are the vegetable colors, indigo, turmeric, annatto, and logwood, and the animal color, cochineal. While there is but little positive physiologic or clinic evidence to show that the continued use of these bodies in small amounts is harmless, yet it seems to be generally held that they may be employed provided the object is not to conceal inferiority or adulteration.

We owe to Theodore Weyl, of Berlin, our most exact knowledge of the effects of long continued use of the coal-tar colors, and his results indicate that a few colors, notably some of the yellows, are poisonous. It must be borne in mind, however, that except as to some almost negative experiences in manufacturing establishments all information as to the toxic action of these bodies is drawn from experiments on lower animals, and there is uncertainty in carrying inferences from these to the human system.

Among the foods largely colored with a view to enhance their salability are milk and milk products. The community at large tends to regard a rich yellow tint as evidence of good quality in these articles and dealers are not slow to take advantage of such opinions. A color long used by dairymen and milk purveyors is annatto. It is a vegetable color of considerable tinctorial power. Associated with tumeric it is now found in several prepared "butter," "milk," and "cheese" colors.

The detection of annatto color in milk is easy. The sample is mixed with a little baking-soda and a piece of unsized paper partly immersed and allowed to remain for a few hours. The immersed part becomes tinted orange. For the detection of methyl orange or other coal-tar colors in milk, clean undyed wool should be used, the sample being previously mixed with a little ammonia.

*Condensed from *The Dietetic and Hygienic Gazette* for October.

Adulteration of Drugs in the United States.*

BY ALBERT PLAUT.

While it is true that adulteration in the drug business is on the decrease, and while in general the quality of the goods sold to-day in the United States is far better than that of the markets of even twenty years ago, yet in the hunt for the mighty dollar new means of sophistication, new channels in which the merchant and manufacturer of easy conscience may find opportunities for the exercise of his ingenuity are continually being discovered, and in this field it can truly be said "Eternal vigilance is the price of freedom" from dishonest practices.

During the past year, new objects of attack for the manipulators have made their appearance, old and well known ones have continued in evidence, and I am happy to state some have disappeared, let us hope never to come back.

BOSTON OPIUM.

Chief among the latter is the so-called Pudding or Boston Opium. It is only a very short time ago that our markets were flooded with this nefarious production to such an extent that it became necessary, and even customary, to designate the regular grade of commerce as "prime natural" in order to distinguish it from the manipulated stuff. But in this case publicity, the simple knowledge that an adulterated article was being extensively sold, was as usual sufficient to put buyers on their guard, with the inevitable result that in a short period the unprincipled handlers of the stuff, like Othello, found their occupation gone. To-day very little, if any, adulterated opium is to be found in the open market, though I am informed that several quite large parcels have been stowed away in warehouses until the owners think that the trade has forgotten all about "Pudding" opium, when no doubt they will endeavor to get rid of their undesirable acquisitions.

FALSE CUBEBS.

Another article that is to-day rarely met with, though quite common as late as a year ago, is the false or bastard cubeb. The high price which cubebs brought for so many years induced the collecting of the berries of several species of plants of the same family as the true cubeb, and closely resembling it in appearance, but of much less medicinal worth, being deficient both in essential oil and resin. Prices have now fallen so low that it no longer pays to handle the spurious berries, and in consequence they have almost, if not quite disappeared.

False arnica flowers, so called, which were the flowers of a species of elecampane, and were found a year or two ago mixed with the genuine arnica, often to the extent of fifty per cent. are also gone, and for the same reason. While the adulteration was profitable as long as the mixture could be sold for eighteen or twenty cents per pound, it no longer paid when the best goods could be purchased for eight and a half cents.

BETTER ASAFOETIDA.

Asafoetida, too, chiefly owing to the efforts of the efficient U. S. Customs Examiner at New York, is to-day of a much higher average grade than a year ago, and though all the gum sold is not yet up to the pharmacopoeial standard, yet

noteworthy progress has been made, and stones, sand and kindred substances no longer masquerade as "London" Asafoetida. The consumer has been educated, and became willing to pay a fair price for fair goods as soon as he discovered that he had in reality been paying a very high price for what little asafoetida there was in the mixtures formerly supplied.

The Ipecac root that is being sold to-day is also freer from admixtures than that sold a year ago. So-called Carthagena Ipecac, also stems and tops, have repeatedly been denied admittance to the United States at the New York Custom House, and too much praise cannot be bestowed on the Customs authorities of the port for their action in this and similar cases.

Of those substances to the adulteration of which particular consideration has been attracted in the past twelve months, copaiba balsam is one of the chief. A firm of New York importers issued a circular calling attention to the practice of adulterating this important remedy with gurjun balsam, and though some of the tests they recommend are rather crude, and some even impossible to carry out (such for instance as to hold a sample of the suspected balsam "in the sun"), yet their endeavor deserves commendation, and should serve to incite others to proceed in the same direction.

CURACAO VS. BARBADOES ALOES.

Another form of adulteration, or rather of substitution, is the very general sale of Curacao aloes as Barbadoes. I venture to say that there is not a pound of genuine Barbadoes aloes in the country; all that is being sold as such is Curacao aloes, put into gourds, either abroad or here, to deceive the purchaser. Once this fact becomes generally known, the evil will cure itself, for nobody is foolish enough to buy an article in an inconvenient and expensive shape if he can obtain the same goods in a more advantageous form at a lower price. It has also recently come to my notice that aloes from which the aloin has been extracted is being sold as natural aloes. Most of the aloin manufactured, if not all, is prepared from Curacao aloes; after the aloin is extracted from this, the remaining mass closely resembles Cape aloes, though the distinctive odor of the Curacao aloes remains. This combination, "the hands of Esau but the voice of Jacob" should be sufficient to identify the spurious stuff. Aloes should always be tested for aloin.

IMPROVED QUALITY OF INSECT POWDER.

The adulteration of insect powder is not quite as prevalent as in former years; buyers have learned to discriminate, and know better than to expect to get gold dollars for eighty cents. In the nature of things, it is a difficult matter to detect adulterations of this article; they consist mostly of vegetable substances, such as the stems of the plant, and the flowers of the common daisy. Neither of these possess any insecticide power, and they lack the peculiar and strong aroma of true insect powder.

Russian cantharides, when sold in the form of powder, are being largely mixed with the Chinese variety. The latter are very much weaker in vesicant power, but the fraud is difficult of detection, a quantitative test for an active principle being a delicate and difficult operation.

The "cheapening" of olive oil, sesame oil and similar fatty oils by mixing cotton-seed oil with them, appears to go

merrily on. The latest development in this line is that the cotton-seed oil is now being adulterated with paraffine oil, and one is reminded of the lines of Dean Swift:

The little fleas that do us tease,
Have other fleas to bite 'em,
And these in turn have smaller fleas,
So on ad infinitum.

A matter to which I desire to call attention, though it does not come strictly under the head of adulterations, is the sale of mineral lubricating oil under the name of "commercial" castor-oil, "kast-roll," etc. This should receive the condemnation of the entire trade; it is a perilous practice, and while the oil is intended for use as a lubricant only, complications may ensue the results of which are full of danger. Call each article by its true name, and let it sell on its merits. I was sorry to note that one of these brands received testimonials from several wholesale druggists.

The sale of French and Turkish cuttle fish bone as Trieste is also a matter of notoriety, but buyers are getting informed as to the differences, and this petty deception will soon stop of itself.

Of late a species of Jaborandi leaves, differing in appearance from those heretofore commercially known have been brought forward, owing to the extreme scarcity and high-price of the true *Pilocarpus jaborandi*. At first it was supposed that they contained as high a percentage of alkaloid as the true species, but manufacturers now state that they contain but an infinitesimal proportion of pilocarpia, as little as one-eighth of one per cent.; their sale and use should be discouraged.

Selling Verona and Morocco orris root as Florentine is another instance of deceit; when powdered, it is rather difficult to distinguish them.

In fact, the adulteration of crude drugs in the whole state is fortunately fast becoming more and more troublesome, and manipulators are compelled to devote their attention to drugs in powdered form, where detection is less easy. It is therefore of great importance to the trade that Congress has retained in the new Customs Law the provision imposing an import duty of ten per cent. on powdered and ground drugs. The Drug Trade Section of the New York Board of Trade and Transportation was instrumental in bringing this about. The justness and necessity of such a law cannot be questioned.

FRAUDS IN ESSENTIAL OIL.

The best cultivated and most fruitful field for dishonest practices in our branch of trade has always been in the essential oil business, and it continues to be so. Turpentine and alcohol are the most common adulterants, and the oils of lemon, bergamot and orange, lavender, thyme and rosemary, cedar, spruce and hemlock are the old stand-bys and victims of the manipulator. The adulteration of oil rose with geranium oil and of oil sandalwood with cedar oil are also very common. It is really surprising and to be regretted that comparatively so little attention is paid by dealers to the quality of the essential oils which they handle; tests for determining their purity are well known and as a rule simple of execution. The pharmacopoeia gives reliable methods for arriving at the purity of those oils which are mentioned in its pages and other text books, supplying what may be missing in the official volume, are readily obtainable. The clerks in charge of the essential oils

* Report of the Committee on Adulteration presented at the meeting of the National Wholesale Druggists' Association.

can in a short period become most expert in this line, even though they are neither analytical chemists nor graduates in pharmacy, and I would earnestly urge the members of our association to encourage their young men in the pursuit of knowledge in this direction; I know of no other field where the time will be so well paid for.

WE HAVE PURE CHEMICALS.

With pride and pleasure I come to the subject of chemicals; those sold in the United States, both medicinal and technical, are of the very highest standard, and wilful adulteration is of the rarest occurrence. Almost the same unreserved praise can be bestowed on the pharmaceutical and galenic preparations of commerce; as a class they rank high, and it is seldom that one hears of their falling below the pharmacopoeial requirements, or that they materially differ from what they pretend to be.

A form of deceit which should be discountenanced, the more so as the law cannot reach its beneficiaries, is the sale of mixtures of well-known remedies under assumed and fanciful names, intended to make the purchaser believe that he is getting a new and valuable remedy, whereas he is simply paying a high price for oftentimes an inferior article, which under its true name, and of undoubted quality, he can procure at a small percentage of the price of the advertised product. These remarks are by no means intended to palliate substitution; the use of such commodities can soon be stopped by exposure, both through the trade and scientific press and through personal discourse.

LEGISLATION ON ADULTERATION.

The all important question whether adulteration can be suppressed or lessened by legislation seems to be answered in the affirmative by experience, especially in some of the European countries. "You cannot make a man honest by Act of Parliament," is an old saying as true to-day as it ever was, but while punitive laws may not change the nature of the men they are meant to affect, they certainly exercise a deterrent effect on their actions, and love of gain is counterbalanced by fear of exposure and punishment. But legislation of this character should be dealt with very cautiously; the liberty of the individual must be respected, and interfered with as little as possible. Trade and commerce cannot thrive if hampered by regulations which, while intended to make things hot for the malefactor, in their execution act as a chain and a burden to the honest merchant, and opportunities for blackmail, both by Government officials and informers, should be reduced to a minimum. Such laws as the infamous Paddock Law would do a thousand times more harm than good. And the vaporings of such men as its principal advocate, an individual named Wedderburn, as put forth in a recent report to the Agricultural Department, should be branded at once as false and malicious, and their author promptly squelched. I cannot help quoting from his report as follows:

It has been proved that adulteration is general and increasing, and that no kind of food, drugs or liquors is free from the finishing touches of the manipulators. * * * The extent of adulteration is fully fifteen per cent., of which two per cent. is of a character injurious to health. But to furnish 65,000,000 people with food, drink and drugs cost not less than \$6,760,000,000, and it is found that the amount of adulteration reaches the immense sum of \$6,014,000,000 annually. As at least a per cent. of the whole is deleterious to health, \$135,000,000 constitutes the annual amount paid by the American people for sacrifice of their lives or injury of their health.

These assertions and figures remind one of nothing as much as of Colonel Sellers and his eye-water. We all know how untrue both the premises and the deductions are, as far as they relate to drugs and medicines, and his exaggerations are so apparent and so enormous that they defeat their own purpose and simply serve to show the mendacity of their author.

How unreliable and misleading figures are in this connection, is shown by an article in the "Chemist and Druggist" on this subject, reviewing the report of the British Local Government Board on the working of the Sale of Food and Drugs Act. I extract the following:

We find it stated that the Bristol analyst analyzed 350 samples and found 23 of them adulterated; the Gloucester official tested 26 samples and condemned 9 of them. The most stolid of Whitehall mathematicians even will hardly assume from these figures that adulteration is five times as prevalent in Gloucester as it is at Bristol, which is what the statistics establish if they establish anything. It may simply mean that at Gloucester samples were taken with a little more discretion than at Bristol, but as a matter of fact no conclusion of any sort can be drawn from statistics compiled on no fixed basis whatever. And yet the board itself has the audacity year by year to draw up a total summary of all these figures and per cent. averages expressly for the purpose—at least, we can imagine no other—of misleading the simple gentlemen who write editorial articles for the daily papers. * * * The absurdity of such estimates is disclosed when the constituents of the table are looked at. It appears that morality in the jam-trade rose tremendously in 1892. The percentage of adulteration having dropped from 2.7 to 0.6. In beer on the other hand it went up from 4.1 to 16.8 and in drugs from 16.4 to 20.1. Moreover, it must be remembered that the articles said to be adulterated are not those which have proved to have been so; they are only those which the analyst said were impure. Even the innocent board reporter is smart enough to see that his statistics are a little shaky in this respect, for he comments on the drug section as follows: "The extent of the disproportion between the number of samples of drugs reported against, and those in respect of which proceedings were successfully taken, suggests that the substantial adulteration of drugs may possibly be more rare than the percentage in the table would seem to indicate. Of the 241 samples condemned, only 44 were the subject of prosecutions, and in just half of these cases fines were imposed."

Our own laws on this important matter are varied; most of the States have statutes, generally with the English laws on the subject as a basis, fully covering the ground. The trouble lies not as much with the law as with its enforcing; this is very lax as a rule, chiefly because sufficient funds are not placed at the disposal of the officers having the law in charge.

But a much more efficient factor in the suppression of adulteration than legislation ever could be is rapidly making itself felt: Education. Our Colleges of Pharmacy and other similar institutions of learning and our scientific and trade journals, are not only enlarging the knowledge of those engaged in our branch of trade, are not only exposing frauds and humbugs, but at the same time, almost unconsciously, are elevating the character of the individual, quickening his conscience, and developing his ethics. Let us foster them, honor them and help them.

A Medical View of Modern Fiction.*

Among physicians, "The Heavenly Twins" is looked upon, not as a literary venture to be judged by artistic standards, but as a readable presentation of symptoms which suggest definite pathological conditions.

"Ships that Pass in the Night" is admirable as a pulmonary record, and "The Yellow Aster" affords an insight into the psychic phenomena resulting from neglect of natural instincts and desires, which, surviving the appropriate period of life, subsequently assert themselves in the

form of belated maternal love and ex post facto philoprogenitiveness.

In the latter work, the mother of the heroine allows her children to grow up without receiving a single sign of maternal tenderness, but is overtaken before her death by a most singular form of retribution—a sudden and consuming desire for the society of babies, and an overpowering craving to lavish upon children the accumulated stock of motherly love which had not found its appropriate and seasonable outlet. Most of the infants in the neighborhood being provided with mothers, who supply the required amount of caresses, the unfortunate woman dies of a plethora of pent-up baby-talk and unexpended maternal affection, but is happily given time to warn her daughter against a similar fate.

As to Miss Harraden's book, while we find it useful in the profession for its glimpses into refined sick-room conversation and pulmonary persiflage, we regret, from a medical point of view, that after giving such a careful history of the heroine's case, the author permitted her to be killed by an omnibus. It is humiliating, after following attentively the course of the disease, and the method of treatment, to be told that an omnibus was the cause of death, and to be dismissed without hearing the result of the autopsy. Moreover, we found her style so delightful that we would have gladly followed the hero to his last hæmorrhage; but that, too, was denied us.

PATHOLOGY OF THE HEAVENLY TWINS.

Sarah Grand's cases are open to the same objection of incompleteness. She starts out enticingly with such a character, for instance, as Edith's husband, but leaves the later and more interesting phases of his pathological history untold. As a general rule, however, she comes up to the requirement of modern fiction; the cases of most of her characters can be diagnosed; and with a little more clinical experience we have no doubt that her future novels will be above reproach. She will stand unchallenged as the novelist of venereal diseases, just as Du Maurier is first in the field of hypnotic romance, and Beatrice Harraden in the department of laryngeal and pulmonary complaints.

There is danger lest, in the first stages of the medical movement in literature, young writers will attempt to cover too wide a pathological area in their novels, and forget the inexorable law of specialism that obtains in the medical profession itself. The specialistic tendency in medicine must prevail in medical fiction, or the results will be unreliable and superficial. There are neurotic episodes in Mrs. Grand's otherwise consistently venereal work, which we cannot condone. To introduce a parietic or ataxic patient in a dermatological novel would not only destroy the unity of the story, but would justly expose the author to a suspicion of a want of thoroughness. If the writer has determined upon appendicitis as his plot, he should not waste his energies upon irrelevant diseases in his minor characters. He could gain variety by introducing other forms of enteric disorders, but should never exceed the limits of the abdominal region. Until he has had a thorough medical training, we think the course of a single disease should supply him with all the medico-literary material that he can handle in an intelligent manner. A blow on the head supplied the author of "God's Fool" with all the plot that he needed; Ibsen's "Ghosts" is simply the dramatization of an inherited

* American Medico-Surgical Journal.

brain disease; and many a successful short story is based upon a case of simple mania with delusions. There will be time enough for the combination of various ailments in a single work when each of the departments of pathology has its special novel. The task will then be easier because the author can gather the fruits of the labors of others; but, at present, there is no excuse for such a sacrifice of unity and thoroughness. We have no novel of the ear, no drama of the digestive organs, no romance of the kidneys, no pastels of the intestines; and these are only a few of the countless fields for literary and artistic honors.

There are some who will sneer at this, as if the organs of the human body were unfit themes for artistic literary treatment. Ridicule will be thrown on the pioneers of the movement; of course, that is to be expected; but they will persist, nevertheless, and eventually succeed. Not only will the novel of the future contain an ever-increasing amount of medical material, but there are signs of a similar tendency in poetry. Anatomical verse is even now not uncommon, nor is it without serious intent, as is shown by the following stanza describing the mechanics of phonation:

"The larynx now goes up.
The pharynx with a slam
Ejects the note
From out the throat
Pushed by the diaphragm."

Wagner's Music and its Physiological Effects.

The "Province Medicale" for September 1st contains an abstract of an article published in the "Medecine Moderne," in which the author remarks that it is well known that music exercises a quieting influence in certain mental diseases, and that it has been made use of medically in some mental affections.

An American physician, Dr. Warthin, of Michigan, is credited with having made an experimental study of the physiological effects of music on the human organism. Having noticed, he said, in listening to Wagner's music, that the audience appeared to be in a condition strongly analogous to, if not identical with, that of hypnotism, he had concluded that, in order to ascertain the exact effects of music on the physiological functions of the human body, it was preferable to hypnotize the subjects, in order to do away with all exterior impressions. He took five men and two women, who were willing to submit to the experiment. All were in good health and enjoyed music, although they did not possess well-developed musical sensibilities. In their normal condition music did not produce any great emotion or any appreciable physiological effect. The subjects were placed in a room with a piano, and, after falling asleep in the ordinary way, they were hypnotized, whereupon Dr. Warthin made the following suggestions: "You are dead to everything in the world except the music which you are going to hear. You will feel or know nothing except this music. When you awaken, you will recall the sensations that you have experienced." After the subjects were thus prepared, one of Wagner's pieces was played, and the physiological effects on the pulse, the respiration, etc., were observed and registered. The subjects were afterward awakened, and notes were taken of their sensations. For example, the effects on Dr. M. — were as follows: The pulse at first became rapid and fuller, and the tension increased; the

pulsations rose from 60 to 120; then the pulse became very rapid and the tension diminished. At the same time the respiration increased from 18 to 30 a minute. The face showed great agitation; the entire body moved; the legs were raised and the arms beat the air, and the body was covered with a profuse perspiration. When the doctor was awakened, he declared that he had felt the music, not as a sound, but as a general sensation, as a sort of excitation produced by "rushing furiously through space." The same sensation was also experienced by another subject, and the same effects on the pulse and the respiration were noted, but there was no movement of the body or any change in the facial expression. The skin was covered profusely with perspiration. It was noticed that the same selection played during a normal sleep produced no effects comparable to the results observed during hypnotism, and did not determine any physiological modification.

The Valhalla music gave rise at first to a slackening of the pulse with increased tension, afterward extreme acceleration of the pulsations, and a diminishing of the tension. The sensation experienced by the subject was that of "sublime grandeur and calm." The music from the scene where Brunhilde calls Sigmund to Valhalla gave rise to marked modifications of the pulse, which became weak, irregular, and very small. The respiration diminished in frequency, and became sighing; the face was pale and covered with a cold perspiration. The sensations experienced by the subject were those resembling "death"; no other definite impressions could be described.

THE HYPNOTIC INFLUENCE OF MUSIC.

Dr. Warthin noticed that, in order to produce hypnotism, music was superior to all other ordinary methods. In this respect, the influence of different selections was rather variable. Thus, one of the subjects could not be hypnotized except with a certain selection from Tannhauser, and before the fifth measure was reached he was ordinarily completely hypnotized.

Wagner's music has been accused, says the writer, of provoking erotism, but Dr. Warthin's experiments have shown that this accusation is entirely without foundation. Various passages from Die Walkure and from Tristan and Isolde, which had been particularly criticised from this special point of view, had given rise in hypnotized subjects to sensations of "desire" and of "frenzy," but not the least sensual excitation or erotic suggestion. Dr. Warthin recognized, however, that, aided by verbal suggestion, the music of these passages might produce similar effects, and that then the sensation of "desire" would approach that of "physical desire"; but the musical sounds themselves were incapable of provoking a condition of genital erotism.

These are the most interesting facts noted by Dr. Warthin in the course of his experiments. From a therapeutic point of view, there is not much to be gained from them. The author remarks that he would not fail in respect to Wagner, but he thinks that the results which appear to be most clearly set forth in these experiments are the sedatory and hypnotic effects of his music. In less scientific terms, the music from Die Walkure produces, above all, perspiration, and that from Tannhauser induces sleep.

Ingrowing Nails.

At a recent meeting of the Congres de l'Association Francaise pour l'avancement

des sciences, a report of which is published in the Progres medical for September 1st, M. Felix Regnault, of Paris, read a paper on this subject. He remarked that different writers had attributed this trouble to many causes—such as lymphatism, improper shoes, etc.—without defining the relative importance of each. Some writers had regarded shoes as the principal influence in causing ingrowing nails, although Dionis had observed ingrowing nails among barefooted monks, and Binaud had seen it among tuberculous patients who were confined to their beds. Tight shoes had deviated the great toe and bent the nail, but not sufficiently to cause ingrowing, and, although it might be curved like a claw and sunk deeply into the flesh, it did not necessarily give rise to ulceration. Ponlet had shown that lymphatic persons who had small, flat nails and a thick great toe were often subject to ingrowing nails. The constitutional condition was the primary cause; shoes played only a secondary part and applied only to one class of ingrowing nails, which occurred in healthy, non-strumous persons, the great toe of whom had been more or less altered by the kind of shoes worn.

M. Regnault thought that traumatism and dirt were predominant factors in giving rise to cultures of common microbes in the pus in the groove of the nails. Sometimes, also, a contusion of the great toe had caused ingrowing nail. Traumatism might occur after cutting the nails. The speaker had observed two cases, one where the nail had been improperly cut and the skin broken; several days afterward the nail had begun to grow in. In the other case, that of a young man who had his nails attended to in a bathing establishment, suppuration had set in eight hours afterward. This pathogenic knowledge, said the speaker, had an important bearing in relation to the treatment; if ingrowing nails were properly cared for at the beginning, they were easily cured by constant bathing in carbolic water and by antiseptic dressings.

Thomas Carlyle on the Medical Priesthood.

One of the most interesting features of the excursion to Tintern Abbey at the annual meeting of the British Medical Association at Bristol was the reading by Dr. Yeats of a letter from Thomas Carlyle, which he said had never before been published.* It was addressed to the author of a book entitled "The Healing Art the Right Hand of the Church," by "Therapentes," (Sutherland & Knox, Edinburgh, 1859). Dr. Yeats stated that "Therapentes" is still living. The following is the text of the letter.

CHelsea, February 25, 1859.

DEAR SIR: I have received your book which you were kind enough to send me, and I beg to return you thanks for the same. It is a book (unlike many that come to me here) of a serious nature, the fruit of long study, meditation, inquiry, and evidently of perfect conviction on your part.

I believe, and have long believed, the essential idea it sets forth to be not only true, but of the very highest importance to mankind, namely, that the Physician must first of all be a Priest (that is to say, a man of pious nobleness, devoted to the service of the Highest, and prepared to endure and endeavor for that same, taking no counsel of flesh and blood, as the theory of Priests is)—first of all, a real Priest, and then that the whole world should take supreme counsel of him, as it does of its real or imaginary priests or pontiffs this long while back, and follow said counsel as the actual will of God, which it would be were the physician what I say.

It is curious to remark that *Heilig* in our old Teutonic speech is both holy and also healthy; that the

* British Medical Journal, September 8, 1894.

words holy and healthy, as our antique fathers understood them, are one and the same. A thousand times has that etymology risen sorrowfully upon me in looking at the present distracted position of affairs, which is horrible to think of, if we look earnestly into it, and which cannot well be spoken of at all. We, sure enough, have completely contrived to divorce holiness (as we call it) from health, and have been reaping the fruits very plentifully during these fifteen hundred years.

The notion of bringing our present distracted anomaly of a physician into union with our ditto ditto of a Priest, and making them identical is, of course, extremely chimerical, nor can one easily say what ought to be the first step towards bringing each of them back from his anomalous imaginary condition, and nearer to veracity and the possibility of coalescing. But I am very glad to see the idea started, in any form, under any venture, and heartily wish you success in bringing it home to men's minds.

I remain, Yours truly, T. CARLYLE.
To "Therapeutics," Messrs. Sutherland & Knox,
Booksellers, Edinburgh.

Murder by Microbes.

The pathologically-minded newspaper reporter threatens, according to the British Medical Journal, to become as great a nuisance as the psychological novel writer and certainly seems no less gifted with imagination. Such at least are the first impressions raised by the extraordinary story now going the round of the papers about the Brazilian professor, who is said to have murdered his guests by means of pathogenic microbes ingeniously served in ice and flavored with *creme de menthe*. However minute the details the story cannot throw off the savor of romance, which, moreover, is not lessened by the professor's dramatic exit, for it would appear that he not only ingeniously plotted the death of others, but arranged also for his own, carrying constantly in a hollow tooth a diminutive golden capsule, charged with the intensest poison, which eluded the search of the searchers, but enabled him at the proper moment by a snap of the jaw to snap the thread of life. It is really a good story, and there is this about it that after all it is so constructed as to be within the range of possibility. The public, however, who like to believe these things should understand that it is by no means likely that any evil-minded person who wished to commit such crimes would go out of his way to cultivate the microbes. The microbes of cholera are of great interest, but as they occur in laboratory specimens have seemed from such experiments as have been performed to be of but doubtful fatality when taken by the mouth. Not so, however, the *contagium vivum*, whatever it may be, as emitted from the patient. We have ample enough proof that this is contained in the dejecta, that one of its most common modes of transference is by water, and that its virulence is not destroyed by a freezing temperature. The whole story then is possible, but it was quite unnecessary to make a "professor" the hero of it. Perhaps our suggestion only adds to the horror of the crime. The young lady who protested against being built up in the wall because it was "such a stuffy death," might well protest against being poisoned by cholera dejecta on account of the nastiness of the proceeding. Nevertheless, however sceptical we may be in this particular case, this is a mode of poisoning which is common enough on the larger scale, not professors, however, but water companies being the criminals.

The Physician as a Man of Letters.

It is a great error to think that devotion to medicine is incompatible with wide culture and even with the exercise of considerable activity in general litera-

ture. There is no need to cite examples either among the living or the dead, for such must readily suggest themselves to all our readers. The broader the man, the greater his range of knowledge, the more extended his observation, the deeper his sympathies, the better physician he will be. Helmholtz in science, Holmes in letters, broadened, it is true, out of medicine; yet it was from medicine that they broadened out; and men content to remain within the boundaries of the profession, devoting their chiefest energies to its enlargement, can learn much from the example of these illustrious graduates into larger worlds. Whether it be in diagnosis or in treatment, in criticism of new methods or in just estimate of old ones, in intercourse with patients or with students, a knowledge of men, of letters and of things beyond medicine betters judgment and strengthens influence. It is particularly in intercourse with the community as a whole that the cultured physician can do the greatest good. His recommendation in matters of public health is more potent, and his influence in favor of public morality is more enduring. He meets as an equal the leaders in all departments of human thought and endeavor, and, commanding their respect, elevates the standing of his most obscure brother.—Medical News.

Bibliography.

THE LAW OF THE APOTHECARY. A compendium of both the common and statutory laws governing druggists and chemists in Massachusetts, Maine, New Hampshire, Vermont, Rhode Island and Connecticut, by George Howard Fall, L.L.D., Ph.D., lecturer on Roman Law in the Boston University Law School.

We have examined with pleasure "The Law of the Apothecary," a compendium by Dr. Fall of Boston, on the law affecting the practice of pharmacy in the New England States.

It consists of five sections or chapters. First, Civil Liability; second, Criminal Liability; third, Pharmacy Boards; fourth, Liquor Laws; fifth, Pharmacy Laws of those States. We think it will readily commend itself to the young of those sections intending to enter the practice of pharmacy as a needed help to enable them to better discharge their duties as clerks in the States referred to.

As its preface states it is not a legal work, as legal terms are not used nor are the authorities for examples given, cited; but it is intended to inculcate in the minds of druggists their liabilities and responsibilities. Whether it accomplishes this result is doubtful as it is full of illustrations, counter-illustrations and distinctions which are clearly enough stated and while reading may be understood and appreciated but apply to individual instances and the impression left on the memory in regard to general principles is confused and uncertain. Some principles demonstrated should not however be taken as good law in all the States of the Union; for in some the law is directly opposite. For example Dr. Fall's work shows the law in some of the New England States does not always make the retail druggist responsible for the drugs he sells when he has received the drug from a wholesaler wrongly labeled; whereas in Missouri a retail druggist is held absolutely responsible for the quality of all drugs sold except those sold in the original packages and patent medicines. This difference of the

laws shows the druggists should become familiar with the law of their own States and make it a study; for the result of errors to themselves besides the public is often too serious to be carelessly ignored.

The book before us is written in plain comprehensive language and within the understanding of all and as a pioneer work will find many readers.

SECRET NOSTRUMS AND SYSTEMS OF MEDICINE. A book of formulas, Compiled by Charles W. Oleson, M.D., (Harvard). Fifth edition Revised and Enlarged. Chicago, Oleson & Co., publishers, 35 Clark street, 1904.

This useful little manual of formulae has been enlarged and brought up to date by the incorporation of a number of hitherto unpublished recipes for well known proprietary compounds. It contains descriptions of the composition of some 353 patent medicines and gives detailed explanations of a number of widely advertised and baneful systems of quackery. The new additions number 46 in all and represent the formulas of such compounds as "Actina," Beecham's pills," "Hind's Honey and Almond Cream," "Jayne's Expectorant," "Lydia Pinkham's Compound," Parker's Tonic" and many others. The formula of "Lassar's Paste" is given, but we cannot imagine why it should, as the formula of this is public property and fully known. The author has a large field to cull from and he can render a good service to the profession by turning his attention to some of the fancy preparations advertised more exclusively to the medical profession. The book could be improved we think by dropping formulas which relate to obsolete compounds of which "Scotch Oats Essence" is an example.

PROCEEDINGS OF THE THIRTEENTH ANNUAL MEETING OF THE VIRGINIA PHARMACEUTICAL ASSOCIATION, held at Blue Ridge Springs, Va., July, 1894; Lynchburg, Va.

The "Proceedings of the Virginia Pharmaceutical Association," consisting of the secretary's report of the meeting at Blue Ridge Springs, July, 1894, together with reprints of papers read before the association, have been issued in the usual pamphlet form. The whole makes a volume containing 79 pages of reading matter and 15 pages of advertising, bound in stiff paper covers of attractive design. The titles of the papers contained in the report are: "Cream of Tartar Adulteration" and "Antidote to Morphine," by G. E. Barksdale; "Sarsaparilla—plant known as," by C. B. Fleet; "The Unity of Matter," by Gordon Blair; "Value of State Association," by E. A. Craighill. C. B. Fleet, of Lynchburg, who has served the association in the capacity of secretary for a number of years with noticeable ability, is continued in office.

Among the many books for pharmacists promised for this Autumn is a "Manual of Organic Materia Medica and Pharmacognosy," by L. E. Sayre, Ph. G., Professor of Pharmacy and Materia Medica of the School of Pharmacy of the University of Kansas. The work is to be issued from the press of P. Blakiston, Son & Co. The matter will it is stated be presented in a concise manner, without interfering with the clearness of meaning so necessary in a text-book. In the arrangement of subjects the principal features and relationships of the drug are clearly set forth most at a glance. The design of the author has apparently been to make the study of *Materia Medica* in all its branches assume

an interesting as well as instructive aspect, at the same time to give a comprehensive view of the various organic drugs used in the United States. The book will be an octavo of about 500 pages with something like 500 illustrations.

Novidades Medico-Pharmaceuticas is the title of a neat little pharmaceutical periodical, of which we have received Nos. 1, 2 and 3. It is printed in Portuguese and is intended for circulation in Portugal and its colonies and Brazil. The new periodical is supported entirely by its advertising patrons and is distributed free of charge to physicians and pharmacists. The advertising pages are kept separate from the reading pages, a feature which should contribute to its ready acceptance by the class for which it is intended. It is published from the Pharmacia Magalhaes, 292 Rua do Rosario, Porto, Portugal.

Another new medico-pharmaceutical periodical which has found its way to our exchange desk is El Recopilador, published as a monthly at 175 Cortes, Barce-Spain. Subscription, 7 pesetas yearly.

"The Spatula" is the title of a new pharmaceutical publication which emanates from the Spatula Publishing Co., 8 Oliver Street, Boston. The publication will appear as a monthly and addresses itself to the commercial rather than the scientific pharmacist. It is printed on calendered paper and contains numerous illustrations. The publishers state that "The publication is in no way intended to rival or antagonize the other excellent periodicals devoted to druggists and pharmacists that are already in the field." In addition to its other features "The Spatula" aims to make a specialty of elucidating the mysteries of the laws pertaining to the regulation of pharmacy in several states of the Union. The law department will be conducted by George H. Fall, Ph. D., a lecturer in the Boston University Law School. The new monthly has adopted for its motto the words "Keep sweet," and in requesting its readers to contribute they are careful to enjoin them above everything else upon whichever side they write to "keep sweet." The subscription price is 50 cents per year, 10 cents per copy. The initial number is a good one.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make us of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

The Prospects for Free Alcohol.—F. D. B. writes: "Can you advise me in regard to the prospects for free alcohol for druggists' use? I with many others would like to know when the new law will go into effect."

The prospects for free alcohol for use in arts and for medicinal purposes are extremely dim. The authorities in Washington have apparently made up their minds to ignore the provisions of the Hoar amendment until Congress re-assembles,

when the amendment will probably be amended in some form to exclude retail druggists and makers of proprietary medicines from any benefit. Whatever benefit may come from a law providing for free alcohol for use in the manufacture of medicinal it is unlikely that retailers will participate, manufacturing chemists only being likely to receive consideration.

Cough Cures.—O. M. asks for a selection of formulas for cough remedies, and we give the following:

SYRUP WILD CHERRY COMPOUND.

Wild cherry.....	xvi
Spikenard.....	iv
Ipecac.....	iii
Blood root.....	i
Tinct. opium.....	iv
Alcohol, 1 part	
Water, 2 parts	q. s.

Macerate 12 hours and then percolate to 5 pints; add the tincture of opium and filter; then dissolve 6 lbs. of sugar in the filtrate by percolation and add enough simple syrup or glycerin to make one gallon. Tar can be added, if desired, as in the formula which follows:

COMPOUND SYRUP OF TAR.

Fluid extract of liquorice.....	ii
Tinct. opium camphorat.....	ii
Syrup ipecac.....	ii
Glycerite tar, N. F.....	ss
Syrup tolu, enough to make 1 pint.	

By using one-half the quantity of liquid extract of liquorice made according to formula published in the last issue of THE AMERICAN DRUGGIST, a much nicer preparation can be obtained.

TAR HOREHOUND COUGH SYRUP.

Horehound.....	ii
Irish moss.....	iss
Ammon. muriate.....	ii
Boiling water.....	Oiv

Let stand for 12 hours, strain and add:

Solution of tar (oil tar 3 ii, chloroform 3 ss). fl. 3 vi	
Flid. extract of senna.....	ii
Syrup squills comp.....	Oj

This makes a good cough syrup and finds ready sale; it costs about 85 cents per dozen, 2 ounce size; no better is sold by non-secret manufacturers for less than \$1.25 per dozen.

SYRUP WHITE PINE COMPOUND.

Balm gilead buds, spikenard, blood, root	
ss.....	5½ ounces
White pine.....	30 ounces
Wild cherry.....	40 ounces
Ipecac.....	4 ounces
Sassafras.....	2½ ounces
Morphine acetate.....	2 drams
Chloroform.....	5½ ounces
Alcohol, 1 part	
Water, 2 parts	q. s.

After 12 hours maceration of drugs reduced to coarse powder, percolate with the menstruum to 24 pints. In this dissolve 24 pounds of sugar by percolation and add ¾ gallon confectioner's glucose. Dissolve the morphine in 8 ounces of water and add sufficient acetic acid to remove turbidity. Mix with syrup, add the chloroform and agitate well; add lastly enough simple syrup to make 40 pints.

Mounting Photographs.—J. W. asks how to make a good paste for mounting photographs.

We would advise the use of a paste made as follows:

A. Best Bermuda arrowroot.....	1½ ounces
Sheet gelatin or best Russian glue. 80	grains
Water.....	15 ounces
Wood alcohol.....	1 ounce

Put the arrowroot into a small pan, add one ounce water, and mix it thoroughly up with a spoon, or the ordinary mounting brush, until it is like thick cream, then

add fourteen ounces water and the gelatine broken into small fragments. Boil for four or five minutes, set it aside until partially cold, then add the methylated spirit and six drops of pure carbolic acid. Be very particular to add the alcohol in a gentle stream, stirring rapidly all the time. Keep it in a corked stock bottle and take out as much as may be required for the time and work it up nicely with the brush.

Glycerin and Cucumber.—L. F. We find a good formula for this preparation in "The Manual of Formulæ." It reads:

I.

Cucumber ointment.....	i
White glycerin soap.....	ss
Hot distilled water.....	xxxii
Essence jockey club.....	ss

Dissolve the soap in fine shreds in 3 ounces of the water, over a water bath. Liquify the ointment and mix with the soap solution in a mortar. Then gradually add the remainder of the water with constant stirring. Introduce the jockey club before it cools.

II.

Castile soap, white, in fine shavings.....	i
Cucumber pomade.....	ii
Glycerin.....	iv
Rose water.....	Oiiij

The soap is dissolved in about half a pint of rose water by the aid of gentle heat and the solution thus made, poured gradually on to the cucumber pomade, previously melted in a warm mortar, stirring constantly. The glycerin is mixed with the rest of the rose water and gradually added, the stirring being continued till the whole is cold. It is then allowed to stand for a few hours and then again stirred, when a beautiful emulsion results. It can be perfumed if desired.

III.

Oil of citronella.....	so minims
White castile soap.....	4 drams
Glycerin, pure.....	1 fl. ounce
Cucumber pomade.....	3 ounces
Warm distilled water to make 2 pints.	

Cut the soap into fine shavings and dissolve by aid of heat in 2½ ounces of water; then place in a warm mortar and gradually incorporate the pomade, glycerin and citronella oil. Finally add the remainder of the warm distilled water, place the whole in a half gallon bottle and shake till cold.

Bradycrotine, V. E. This compound, which we are told is no longer on the market, is said to have a composition resembling the following:

Caffeine.....	5 grains
Potassium bromide.....	50 grains
Sodium bromide.....	50 grains
Simple syrup.....	2 drams
Alcohol.....	2 drams
Port wine, sufficient to make 2 ounces	
Caramel, sufficient to color,	

What Results.—C. L. M. writes: "I have in my possession a formula left by an old English residenter which reads:

Tanners' oil (fish oil).....	1 lb.
Spirit turpentine.....	1 lb.
Sulphuric acid.....	¼ oz.

Mix the oil and turpentine and add the acid.

I would like to know what changes take place after adding the acid, also what the preparation is good for."

The mixture will undergo slow oxidation, and a slight amount of terebene will probably result from the action of the acid upon the turpentine. The mixture is apparently intended for local application in the treatment of "scratches" in veterinary practice.

Brass Dips.—C. D. S. asks for formulas for brass dips that will produce a good lustre of either black or blue.

The following solution gives the brass first a rosy tint and then colors it violet and blue:

Copper sulphate.....	435 grs.
Sodium hyposulphite.....	300 "
Cream tartar.....	150 "
Water.....	1 pint.

Upon leaving the brass objects immersed in the following mixture contained in cork vessels, they at length acquire a very beautiful blue color:

Potassium sulphide.....	15 grs.
Ammonia water.....	75 mms.
Water.....	4 oss.

To blacken brass dissolve 80 parts of carbonate of copper in 250 parts of water of ammonia, and add 500 parts of water. The brass objects to be blackened are suspended in the liquid by means of a brass or copper wire.

Pepper Catsup.—P. A. M.—The recipe which finds most favor in the Southern States, where pepper catsup is a popular table relish, is the following:

Green peppers.....	4 dozen
Onions.....	5
Garlic.....	1 handful
Grated horseradish.....	3 tablespoonfuls

Place the whole in a brass or porcelain lined kettle and boil till soft enough to mash through a sieve. Transfer the pulpy mass to a suitable container and add

Cider vinegar.....	2 quarts
Ground black pepper.....	2 tablespoonfuls
Table salt.....	1 tablespoonful
Ground allspice.....	1 tablespoonful
Ground mace.....	1 tablespoonful
Ground cloves.....	1/2 tablespoonful
Ground cinnamon.....	1/2 tablespoonful
Sugar.....	1 tablespoonful

Make a uniform mixture of the spices by passing them through a sieve; then add the remaining ingredients and incorporate with the pulp. Let the whole boil fifteen minutes, and when cool bottle.

The formula given above is an old family recipe which has never before been published.

The Degree of Pharm. D.—"Ph.G." propounds the following queries:

1. What does the degree "Doctor of Pharmacy" signify?
2. What qualifications are required to obtain this degree?
3. Please name the colleges which confer it.

It has the same significance as the degree of "Graduate in Pharmacy," except in the case of the Illinois College, Chicago.

The qualifications required do not differ from those required from aspirants for the Ph. G. degree, except in the college already named.

Howard, Washington (colored); National, Washington; Scio, Scio, O. Illinois College, Chicago, grants Ph. D. degree as a post graduate honor, on special examination.

An Impecunious Student.—A subscriber writes that he wishes to become a graduate in pharmacy, and has but little money at his command. He therefore asks the advice of our readers as how he shall best go about obtaining the desired collegiate education.

We would be pleased to hear from such of our readers as have surmounted similar difficulties in the attainment of a collegiate education with sufficient of detail in their account to be of practical value to aspiring students.

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College Place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts," will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Questions; Fifth Series

41. Ferrons salts are thus distinguished: Caustic alkalies and ammonia give nearly white precipitates, insoluble in excess of reagent, rapidly becoming green and ultimately brown, by exposure to the air; the carbonates of potassium, sodium and ammonium throw down whitish ferrous carbonate, also very subject to change. Hydrogen sulphide gives no precipitate in acid solution but ammonium sulphide throws down black ferrous sulphide soluble in dilute acids. Potassium ferrocyanide gives a nearly white precipitate becoming deep blue on exposure to air; the ferricyanide gives at once a deep blue precipitate; potassium sulph-cyanide gives no change.

Ferric salts are thus characterized: Caustic fixed alkalies and ammonia gives foxy-red precipitates of ferric hydrate, insoluble in excess. The carbonates behave in the same manner, the carbonic acid escaping. Hydrogen sulphide in an acid solution, gives a nearly white precipitate of sulphur, and reduces the ferrons to ferric salts. Ammonium sulphide gives a black precipitate, slightly soluble in excess. Potassium ferrocyanide yields Prussian blue, potassium ferric cyanide produces a deep brown color, potassium sulpho-cyanide a blood-red color. Tincture or infusion nut galls strikes a deep blue black with the most dilute solutions of ferric salts. In making solution of ferric chloride the ferro cyanide test is used. In the manufacture of potassium cyanide the test of ferrous sulphate is used, which gives a blue color, while ferric sulphate gives Prussian blue.

42. When alkaloids combine with acids to form salts they behave exactly as ammonia does, in that they unite with the whole acid molecule, including its hydrogen, instead of replacing that hydrogen as do the alkalies generally.

43. A decinormal solution is one-tenth the strength of a normal solution, which is made by dissolving in one litre of pure water the molecular weight of a univalent substance expressed in grammes.

45. A centinormal soda solution is one-hundredth the strength of a normal solution, and since the molecular weight of soda is 40, then a centinormal is 1.100 of 40, or 0.4 grammes dissolved in 1 litre of pure water.

46. Methyl orange is used in analysis in the form of a solution; it acquires a yellow color when brought in contact with alkali hydrates, carbonates, or bicarbonates. Carbonic acid does not affect it, but sulphuric, hydrochloric and other acids change its

color to crimson. It is not suited for use with organic acids.

47. Litmus is a blue coloring matter made from certain lichens. Acids turn it red. Alkalies restore the blue color. When suitable unsized paper like thin white filter paper is dipped in a weak solution of litmus and then dried it forms what is called test paper. The solution of litmus used for this purpose is made with weak alcohol and when used without the addition of acid it forms blue litmus paper, which is turned red by acids, by certain salts, and by some normal salts in which the acid radical is a powerful one while the positive radical is comparatively weak. If litmus tincture is treated with a little dilute hydrochloric acid so that its blue color is just changed to red then paper dipped in this liquid and dried constitutes red litmus paper, which is turned blue by soluble bases and by some salts of a strong base with weak acids.

48. Turmeric paper is used as a test for alkalies.

49. Neutralization is the term applied to the saturation of an alkali with an acid, or of an acid with an alkali. It indicates that the acid and the alkali have been brought together in molecular proportions, and that the distinctively acid properties on the one hand and the distinctively alkaline properties on the other have thereby been destroyed.

50. Acid salts have a neutral reaction on test paper, that is when they will no longer turn blue litmus red or red litmus blue.

Answer to Questions; Fourth Series.

The following were omitted in the last issue:

35. If a solid weighs 680 grains in air and 540 grains in ether then its loss of weight is 140 grains, and as the specific gravity of ether is to the specific gravity of water, so is the loss of weight in ether to the loss of weight in water, then $75 : 1 :: 140 : x$, or $186.66 =$ the loss of weight in water, therefore the specific gravity is $\frac{640}{186.66}$ or 3.428.

36. If a solid weighs 795 grains in benzene and 845 grains in air, its loss by immersion is 50 grains, then, $.835 : 1 :: 50 : x$, or $59.88 =$ the loss of weight in water, therefore the specific gravity is $\frac{845}{59.88}$ or 14.11

37. If a piece of cork weighs 154 grains and attached to a sinker weighing 921 in water, and the whole weighs 425 grains in water, then the weight of the cork in water will be equal to $921 - 425$ or 496 grains, and the loss of weight in water will be $496 + 154$ or 650 grains, then applying the rule, divide the weight of the body in air by its loss of weight in water; therefore the specific gravity is $\frac{154}{650} = 0.237$.

38. $2334 + 75 = 2409 \cdot \frac{2884}{2409} = 0.969 =$ specific gravity.

Questions; Eighth Series.

MATERIA MEDICA.
Reference Books: Maiesch's Organic Materia Medica, Sayre's Materia Medica, the Dispensatories, etc.

71. What insect of the order coleoptera is official, and name two closely allied in sects which possess similar medicinal action.

72. Describe the method followed in rearing an insect of the order hemiptera which has great tinctorial powers and name two commercial varieties of the insect.

73. Give the systematic names, the class, order, habitat, therapeutic uses and a brief description of the cock-roach.

74. Give the origin and habitat and describe two varieties of leeches.

75. What is the systematic name, and the habitat of the chicken. Describe the egg and name the principal components of an egg, giving the proportions of each.

76. Give the origin of Russian Isinglass and describe three forms in which it comes into commerce. What is the source of agar agar?

77. Give the origin of musk and a brief description of it.

78. What is castoreum and where is it obtained?

79. Give the source, and tests of pepsin.

80. What is hyraceum; what are its source and its properties?

Students' Column.

Organic Materia Medica of the U. S. P.

[Continued from Page 236.]

Granatum. Pomegranate.

BOTANICAL NAME.....Punica granatum.
NATURAL ORDER.....Lythrales.
HABITAT.....Indigenous to South-western Asia, from Northern India to Palestine.
CONSTITUENTS.....Tannin, gallic acid and alkaloids, pelletierine, methylpelletierene, pseudo-pelletierene and isopelletierene.
PROPERTIES.....Astringent, anthelmintic for *Tenia Solium*.
PARTS USED.....The bark of the stem and root.

Dose—Gm. 1.30—2.00.

Grindelia. Grindelia.

BOTANICAL NAME.....Grindelia robusta.
NATURAL ORDER.....Composite.
HABITAT.....North America and Mexico.
CONSTITUENTS.....Volatile oil, bitter principle and resin.
PROPERTIES.....Anti asthmatic, mucous sedative.
PARTS USED.....The leaves and flowering tops.

Dose—Ext. fld. Cc. 0.60—1.20.

Guaiaci Lignum. Gualacum wood, lignum vitae.

BOTANICAL NAME.....Gualacum officinale and Gualacum sanctum.
NATURAL ORDER.....Zygophylles.
HABITAT.....The West Indies, especially Jamaica and St. Domingo.
CONSTITUENTS.....Resin, chief constituent.
PROPERTIES.....Diaphoretic and alterative.
PARTS USED.....The heart-wood.

Dose—Resin Gm. 0.60—2.00.

Guarana. Guarana.

BOTANICAL NAME.....Paullinia Cupana.
NATURAL ORDER.....Sapindaceae.
HABITAT.....Brazil.
CONSTITUENTS.....Caffeine, saponine and volatile oil.
PROPERTIES.....Astringent; cerebral stimulant.
PARTS USED.....The seeds prepared in form of dried paste.

Dose—Ext. fld. Cc. 0.60—1.20.

Hamatoxylon. Hamatoxylon, logwood.

BOTANICAL NAME.....Hamatoxylon campechianum.
NATURAL ORDER.....Leguminosae.
HABITAT.....Shores of the Gulf of Campechy and other parts of Central America.
CONSTITUENTS.....Tannin; crystalline principle named haematoxylin.
PROPERTIES.....Astringent, anti-diarrhoeic.
PARTS USED.....The heart-wood.

Dose—Ext. Gm. 0.60—1.20.

Hamamelis. Hamamelis, witchhazel.

BOTANICAL NAME.....Hamamelis Virginiana.
NATURAL ORDER.....Hamamelidaceae.
HABITAT.....Canada and United States.
CONSTITUENTS.....Tannin and a bitter principle.
PROPERTIES.....Astringent, sedative, discutient.
PARTS USED.....The leaves.

Dose—Ext. fld. Gm. 0.60—1.20.

Hedeoma. Hedeoma, pennyroyal.

BOTANICAL NAME.....Hedeoma pulegoides.
NATURAL ORDER.....Labiatae.
HABITAT.....North America.
CONSTITUENTS.....Volatile oil.
PROPERTIES.....Aromatic stimulant.
PARTS USED.....The leaves and tops.

Dose—Inf. Cc. 60.

Humulus. Hops.

BOTANICAL NAME.....Humulus Lupulus.
NATURAL ORDER.....Urticaceae.
HABITAT.....England, many parts of Europe and North America.
CONSTITUENTS.....Tannin, volatile oil, resin, volatile alkaloid, lupuline.

PROPERTIES.....Tonic, narcotic, sedative.
PARTS USED.....The strobiles.

Dose—Tinct. Cc. 4—12.

Hydrastis. Hydrastis, Golden Seal, yellow root

BOTANICAL NAME.....Hydrastis canadensis.
NATURAL ORDER.....Ranunculaceae.
HABITAT.....Canada and the United States east of the Mississippi.
CONSTITUENTS.....Alkaloids, berberine, hydrastine, fixed oils and coloring matter.
PROPERTIES.....Bitter tonic, antiseptic and alterative in leucorrhoea, gonorrhoea, etc.
PARTS USED.....The rhizome and roots.

Dose—Ext. fld. Cc. 4; Tinct. Cc. 4.



The Jobbers and the Retailers.

Editor AMERICAN DRUGGIST:

At the recent meeting of the retail druggists of New York and Brooklyn, George J. Seabury in his remarks gave the retail druggists some unpalatable but, provided they have the wisdom to direct their policy accordingly, wholesome facts. It is now many years since Mr. Seabury insisted that there could be no remedy for the cutting evil until the retailers should stop crying "Help us, O Hercules" and put their own shoulders to the wheel, by a thorough organization, instead of calling on the proprietors to do what in the very nature of things is, for them, an impossibility.

A CHAIN IS ONLY AS STRONG AS ITS WEAKEST LINK.

At this meeting he again called attention to the fact that they must have practically all of the retail druggists in their organization in order to succeed, upon the well-known principle, trite as the statement of it may be, that "A chain is only as strong as its weakest link." So far all plans proposed have very many very weak links; and it is a foregone conclusion that one determined cutter can defeat any plan, as in Chicago and San Francisco, on the lines of the policy which has received so much attention from the N. W. D. A. and the Interstate League. "Faithful are the wounds of a friend, but the kisses of an enemy are deceitful" and when Mr. Seabury calls attention to the weakness of human nature as exemplified by a certain proportion of the jobbers who will not or do not attach any more importance to a written contract made with the proprietor than to so much waste paper, it must be evident to any sensible man that any plan which depends upon their co-operation is foredoomed to failure.

MUSLIN DRUGGISTS.

At the meeting referred to Mr. H. V. Meyers said that Mr. Seabury did not seem to be aware of the fact that his plasters had been sold in dry goods houses. Mr. Seabury was aware of this fact, for in a recent instance the jobber who sold to a dry goods house in this city, not only acknowledged the fact that he had sold these plasters after signing a contract not to do it, but stated that if he did not do so others would, and had shown so little regard for ethics as to place advertisements of proprietary goods

of his own in the Benson plasters so sold. This jobber is a member of the N. W. D. A. Instances might be multiplied; but what hope can there be for the proprietors succeeding when the chairman of the proprietary committee of the N. W. D. A. admitted the truth of similar charges against his own house, made by Dr. Pierce at the meeting in New York. *Et tu, Brute!*

TRAITORS IN THE CAMP.

Seabury & Johnson have taken pains to investigate on their own responsibility the question of who supplies the cutter, and by means, known only to themselves, have become satisfied that to endeavor to boycott those who do it, would require us to boycott many of the friends of the Detroit plan who shout the loudest in the N. W. D. A. meetings. It is not alone in supplying the cutters but in other directions that quite a respectable minority of the N. W. D. A. are lacking in allegiance to the simplest principles of business ethics. For a slight apparent profit (although at a loss of customers), many of the jobbers do not hesitate to substitute inferior goods at the same prices at which they should furnish goods known to be standard and of a superior quality; besides making many other unscrupulous and unbusinesslike demands upon the manufacturer. This situation, no doubt, will account for the number who have left the association since the meeting in Detroit last year, which number would have been larger had it not been for the personal efforts made to hold them in the organization; no one supposes for a moment that the increase of the dues was the real reason for the resignations, but it was on account of the useless expense of pursuing a hypocritical policy that could be productive of no good to the retailers or to any one but the jobbers. The recital of these facts at this time is not for the purpose of complaining or with any idea of so reforming the guilty jobbers as to prevent such action in the future, but because a recognition of the situation in the estimation of Mr. Seabury and of others who have given this matter careful thought, should lead to action by the Interstate League to accomplish the purposes for which they are formed, as soon as it has a practically complete organization of the druggists of the United States, at least in the large cities.

THE STRENGTH OF THE LEAGUE.

It will then be a very easy matter for the League to establish itself in the cutting business for the benefit of their members in the vicinity where the cutter makes the prices; thus using competition to cure unfair competition on the *similia similibus curantur* principle.

I doubt if there has ever been a case of cutting yet that could not have been cured by the retail druggists taking advantage of the circumstances to establish a large business in close proximity to the cutter and run on the same principles at low prices and small profits; the profits of course to be divided among the members of the League, or put into the common treasury to be applied to the payment of expenses. This way lies success; any other method looking for

extraneous help, is bound to fail, for if signed contracts have no binding effect, neither has annual eloquence, and it is futile to follow the plan suggested by Lowell in his "Hosea Biglow" papers.

"Now there wuz some dogs (not wuth their keep)
That sheered their cousins' taste and sheered the sheep."

They sez 'Be ginrous, let 'em swear right in,
An' if they backside let 'em swear agin.
Jest let 'em put on sheep-skins while they're swearin';
To ask for more 'ould be beyond all bearin'."

"Be ginrous for yourselves where *you're* to pay,
That's the best practice," sez a shepherd gray.
"Ez for their oaths, they wun't be wuth a button
Long's you don't cure 'em of their taste for mutton.
Th'aint but one solid way, how e'er you puzzle:
Tell they're converted let 'em wear a muzzle."

Verbum sapientis sufficit.

G. W. HOPPING.

New York, October 20, 1894.

or a new canal boat, or a new watch, or a new anything else.

The wife, who is posted on advertising because she reads advertisements, is liable to send for announcements of the article her husband desires, and hand

TRY OUR PHOSPHATE.

It is Soda-lightful.

Contributed by Jno. A. Camp, Des Moines, Iowa.



Written for the
American Druggist and Pharmaceutical Record

WOMAN THE BUYER.

WHAT THEY WANT, NOT WHAT YOU WANT.

By Nath'l C. Fowler, Jr.

Goods without buyers are worse than buyers without goods.

You want customers more than customers want you.

The independent store doesn't make much money.

Folks want to buy of a man who wants to sell.

If your business isn't run in the apparent interest of the customer, it isn't business.

People don't want you to do them a favor in selling them goods, they want to do you a favor in buying of you.

Everything we eat, drink, wear, or have for personal comfort, is purchased directly or indirectly by women.

Every man has a wife, or wants one.

He had a mother to begin with, and the chances are he has sisters, and if he hasn't sisters he has female cousins.

A woman keeps house for him, or he spends a part of his time at the house of some woman.

The man who doesn't like women isn't a man, and the man who says he is un-influenced by women is a liar.

The clothes a man wears are either directly selected by women in the first place or they must pass through the woman's criticism in the second place.

There never was a man with a wife or a wife-elect, who dared to buy a second pair of trousers of the tailor who didn't fit the taste of the woman in the first pair.

The man considers himself too busy to read advertisements.

The woman would as soon give up her tea as advertisement reading.

The advertising columns of the paper and magazine are as interesting to the woman as the reading matter itself, and

generally more so, for the advertisements are readable and 90 per cent. of the alleged literature isn't.

The woman can buy the man's underwear cheaper than the man can buy it himself, and generally the man does not care to bother about it anyway.

The right kind of a wife is directly interested in her husband's business, realizes the shabbiness of the office, and the uncomfortableness of the chairs, long before he does himself, and although the man does not admit it, she is the direct cause of new office furniture, and her

such circulars to him, or she may suggest that he look up a certain kind of engine, canal boat, or watch, and the man, thinking that he does the whole thing himself, follows the suggestion and prides himself on somebody else's cunning.

A little unmanly suggestion turns the tide.

Experience has taught me that 90 per cent. of all articles purchased, unless they be of technical character, or goods in their crude state, are purchased directly through the influence of woman.

The man with any kind of a store is desirous of purchasing goods which the people want, and as woman controls the sale of these goods, he consults his wife, his pretty stenographer, his head bookkeeper, head saleswoman, or some other female authority, in regard to all the goods, unless they be of the character beyond the interest of women.

Fully 90 per cent. of the publications of America are read by four women to one man, and the fact that the advertisements of leading advertisers, no matter what they may sell, appear in these mediums, and pay, indicates that woman is the "man" the advertisers are after, and that the success of their advertising in the majority of cases is in their ability

A LONG WALK

Becomes a Pleasure

When the feet are comfortable. With KUEHNE'S 'CELEBRATED CORN CURE' you can remove your biggest corn; and its action is so gentle that it leaves the foot as clean and healthy as it was before the corn grew. Try this rational helper for diseased feet and be convinced. One trial will show you its merits.

One dime buys it.

One night tries it.

At the end of a week

you pronounce it The Best.

KUEHNE'S PHARMACY,

590 Central Ave.,

JERSEY CITY.

A specimen of New Jersey Advertising.

judgment selects that which the man thinks he selects himself.

The shrewdest advertisers in the country are advertising their goods, whether they be steam engines, or grand pianos, to the women.

The man, at the supper table, or in the drawing room, inadvertently says that he is thinking of buying a new engine,

to attract the woman rather than the man.

There are exceptions, but the exceptions are unimportant.

The law of average is safer to follow than the rule of exception.

It is a man's business to so frame his advertising that the woman will be satisfied with it.

Foolish is the man who paints the front of his store blue, if the women would rather have it red.

Individual taste is worth nothing.

The successful man is he who leaves out himself, and appears to run his business as his customers want him to.

I would give more for the opinions of a dozen women, taken from the rank and file of the great middle class, as to the effectiveness of any man's advertising, than I would for the opinion of that man himself, his partner, his lawyer, his minister, his doctor, and all of his male employees put together.

The advertisement which is thoroughly artistic, beautifully written, with every line in a curve, may read well to the

advertiser, and may not convince a single reader.

Many an advertisement which has appeared unsatisfactory to the advertiser has been the best advertisement the advertiser has put out.

As advertisements are to attract trade, they should be written to the satisfaction of the reader, not to suit the advertiser.

The foolish man runs his business to suit himself.

The wise man runs his business to suit his customers.

In the handwriting on the wall of the inner office of the man of profit flash these words of business light: "Not what I want, but what they want, builds my business."

Henry R. Strong business manager of the National Druggist of St. Louis, was among those in attendance on the recent meeting of the N. W. D. A. and both during and after the meeting he made many friends by his courteous, affable and unassuming manners. Mr. Strong remained in the city for a week or so after the adjournment devoting his time to extending his acquaintance among the trade.

We are advised that J. Leroy Webber, the well-known pepsin expert and pharmaceutical chemist, who for eight years held the position as supervisor of manufacturing in the laboratory of Parke, Davis & Co., and for three years held a similar position with Sharp & Dohme, has accepted the position as superintendent of the Clinton Pharmaceutical Co., manufacturing chemists, Syracuse, N. Y.

The drug store of W. F. Robertson of Cambridge was broken into recently, entrance being obtained through a cellar window, and \$14 taken. A sixteen-year old lad, Fred. L. Burdick, was seen coming from the store. On being arrested he implicated John Galligan and William Wells, other boys about sixteen years old. After an examination before Justice Smith the boys were all held to answer to the court of sessions.

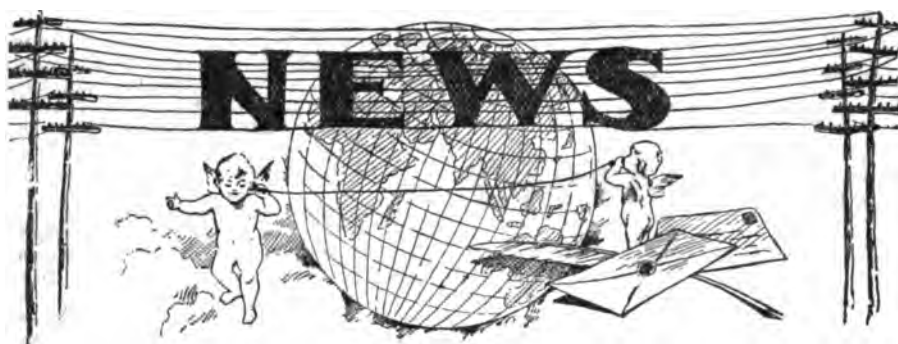
Certainly the best and most exhaustive report of the 42d annual meeting of the American Pharmaceutical Association is published by the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. The report embraces not less than 45 columns and is also embellished with six portraits of the prominent officers of the association. — *Deutsch-Amerikanische Apotheker-Zeitung.*

On September 11 the Constitutional Convention, which has been in session all summer at the Capitol in Albany, reached final passage of propositions previously discussed, and the first to be passed was the one abolishing the office of coroner as a constitutional office. The vote of the delegates was 97 to 48, and this question, with the other proposed amendments to the constitution, will be submitted to the people of the State.

Owing to increased business and the inability of the force now in the city to handle the trade, the firm of Kuelen & Lubbers have made T. H. Van Horn, formerly employed by them as office clerk, a city salesman. Mr. Van Horn entered the employ of Messrs. Kuelen & Lubbers in July, 1893, and, owing to his ability and faithfulness to them, has continued to advance, until he is now promoted to city salesman, where he will no doubt be a success.

The pharmacy at 1128 Broad street, corner of Parkhurst street, Newark, was sold to C. F. Miller, who is a first-class pharmacist and a thorough business man, and has great hopes of making a success of this venture. The store was formerly owned by W. G. Kugler, who has now taken the management of his branch store at 133 Tichenor street, Newark. Mr. Miller intends renovating his new store thoroughly, and making it the model pharmacy of his city, and we wish him all success, as do his many friends and patrons.

The Elizabeth, N. J., Pharmaceutical Association was organized at Washington hall, on Elizabeth avenue, October 9th. Every druggist in the city was present or represented. The following officers were elected: President, George A. Ford; vice-president, Henry J. Schmidt; treasurer, Richard Frohwein; secretary, David



NEW YORK.

A. A. Baker has just returned from a very successful business trip through New Jersey in the interest of his firm.

Nelson Baker & Co. of Detroit have opened a New York office on Maiden Lane near William street. The office is in charge of Mr. Merriman.

Frank J. Hengge, a prominent young druggist of Rome, is dead. Mr. Hengge was at one time employed in A. H. Maloney's drug store in Camden.

Howard Cant, of Stafford's Pharmacy, White Plains, has returned from a two-weeks' visit to his former home in Ontario, Canada.

The Stuart-Harvie Drug Company, with capital \$1,000, and directors Clark A. Stuart, Edwin M. Harvie and Nathaniel Stewart, of Rochester, has been organized in Rochester, N. Y.

The Republican nominee for Congress in the 12th Congressional District of New York is Robert A. Chesebrough of "Vaseline" fame. Druggists in this district take note.

W. D. Beekman, for the past 19 years salesman and bookkeeper with E. S. Gregory & Sons, Fort Plain, has resigned the position and purchased a half interest in the drug business of Walter Shumway.

John Thompson, of the firm of S. Mair, Son & Thompson, manufacturers of surgical instruments and druggists' sundries, London, Eng., is in New York on business connected with the firm. He is at the Fifth Avenue Hotel.

George Knowles has purchased the drug store formerly owned by Menze H. Dillenbeck, who made an assignment several months ago to his brother, Sylvester P. Dil-

lenbeck of Fort Plain. The price paid for the entire stock and fixtures was \$3,000.

"Dr. Black's Black Pills for Black People" is an amusing parody of the widely used alliterative phrase "Dr. Williams' Pink Pills for Pale People" to be seen in a lower Tenth Avenue drug store in the "darky" section.

Scientists and others interested in the circulation of scientific literature will be glad to learn that *Science*, the New York periodical that suspended publication in March last, is to be published again under a plan of co-operation with the American Association for the Advancement of Science.

The summer season may now be said to be fairly at an end. Among the last of those to return to town from the usual summer vacation was R. E. Stellen, of J. M. Maris & Co. He reports having spent a pleasant fortnight in Rockland County.

Sidney Morse Colgate, of the widely known firm of Colgate & Co., perfumes, etc., was married on the 16th inst. to Miss Caroline Bayard Dod, of Orange, N. J. The marriage ceremony took place in the Central Presbyterian Church, Orange, N. J.

George T. Hanning has been appointed receiver in supplementary proceedings for Mary Ebner, who kept a drug store at No. 580 Amsterdam avenue, in the suit of Philip Grassmuck. She and her husband are ordered to give a bill of sale of their rights in the drug store to the receiver. She has been in business there since March, 1893.

The "Greater New York" scheme is again receiving great attention. A commission has been chosen for the purpose of pushing a bill through the legislature for the consolidation of New York city with Brooklyn and the districts. The bill has been drawn up and powerful support is promised.

Strauss; executive committee, George J. Martin, George H. Horning and George B. Hooker. The members present discussed the present condition of the drug business and other interesting matters. Meetings will be held monthly. The next meeting will be at the call of the president.

Ferdinand Lascar, who is apothecary to the Demilt Dispensary of this city and is quite well known in pharmaceutical circles from his contributions to the drug press, is busy on an article concerning the operations of the City Board of Pharmacy. A good deal of dissatisfaction exists in the trade, it is claimed, on account of the number of drug stores which are at present owned and operated by doctors who possess no qualification from the Board of Pharmacy. The evil is felt most on the east side in the uptown districts. Mr. Lascar has a rod in pickle for these gentlemen, and interesting revelations are promised in his article.

Dr. James Quee, a well-known druggist, whose store was for many years at No. 256 Fulton street, Brooklyn, died on Monday at No. 155 58d street, Brooklyn. He was seventy-three years old and was born in Edinburgh, Scotland. He studied medicine and took his degree in that city. In 1850 he came to this country, and was a physician and druggist at Jane and Hudson streets, this city, for nearly a quarter of a century. In the war he served as a surgeon of the 81st Regiment, New York Volunteers. In 1874 he removed to Brooklyn. Three years ago he gave up his store in Fulton street and removed his business to Third avenue and 56th street. He left a son and three daughters. His death was due to heart disease.

THE NEW JERSEY COLLEGE.

The New Jersey College of Pharmacy opened its third course of winter lectures on Monday evening, October 6, at its quarters in the Clinton building. There was a large attendance of physicians, pharmacists and students. The opening address was made by President Louis L. Staehle, who dwelt upon the usefulness of the institution, and the comfort and saving in time which it afforded the students of Newark and vicinity. Addresses were made by the faculty as follows: Prof. Augustus Drescher, chemistry; Prof. Philemon J. Hommel, botany and materia medica; Prof. Frederick L. Harding, pharmacy, and Dr. Wm. S. Disbrow, microscopy. An address was also made by Prof. Chauncey Hermann, and twenty-five new students were registered by the secretary.

TROUBLE IN NEWARK.

Business rivalry, it is said, has caused the filing of a complaint with the State Board of Pharmacy against the proprietor of a drug store at 27 Bowery street, corner Mott street, Newark. The complainant is George Schaeffer, who keeps a drug store at 28 Bowery street, directly opposite. Inquiry was made at both stores by a reporter and, as usual, there are two stories told. Mr. Schaeffer says that two drug stores, one on Union street and the other opposite his place, are run on one diploma against the law. Again, he says that in the drug store opposite, owned either by Dr. L. Southard or George Wallhouser, an unregistered clerk was employed. Mr. Wallhouser said that Dr. Southard owned both stores and managed the Union street store himself. He, Wallhouser, attended to the Bowery street store and had had a helper who sold patent medicines, soaps, tooth brushes and the like, but who did not pre-

pare prescriptions. "The Union street store is run under Dr. Southard's diploma, for he is a druggist," said Mr. Wallhouser, "and my diploma hangs there. This quarrel is only the result of business rivalry, and I court all such charges as are made because I can easily explain matters."

THE BOWLING ASSOCIATION.

The Wholesale Drug Trade Bowling Association has been reorganized with the following officers: G. S. Maringer, president; William DeZeller, treasurer, and Henry O. Barnes, secretary. The tournament was opened Oct. 20 in Reed's alleys, No. 200 Church street, and games will be rolled every Saturday afternoon throughout the season. The following firms were represented in the tournament: Seabury & Johnson, Parke, Davis & Co., Powers & Weightman, The India Rubber Comb Co., Dodge & Olcott, R. W. Robinson & Co., Bruen Bros., Ritchey & Co., Whitall, Tatum & Co., Lanman & Kemp, Colgate & Co., Merck & Co., and C. G. Bacon & Co.

BUFFALO COLLEGE OF PHARMACY.

Students for the coming year are matriculating daily, the number is already greater than ever, and the prospects for a splendid opening next week are positively assured.

That the superior methods and facilities for teaching pharmacy in America are being recognized by English speaking students abroad is evidenced in the case of Mr. Edwin H. McFarland, who, since 1884 has been engaged in the retail drug business in Bangkok, Siam.

Mr. McFarland has recently returned to the United States to pursue a collegiate course in pharmacy and has matriculated at the Buffalo College of Pharmacy.

Additional apparatus is being placed in the Microscopical Laboratory and the facilities of the college generally have been increased to meet the greater demand.

Nearly three hundred fresh organic drugs to be used in this Winter's work have been recently added to the already large collection and stock of the Pharmacognosy Department.

The members of the Beta Theta Sigma Fraternity have augmented their outfit for the study of Pharmacognosy by nearly four hundred specimens of organic drugs, presented them by the faculty. The drugs have been placed in their new cabinet in alphabetical order by Louis C. Corning.

THE N. W. D. A. RODE FREE.

One of the most graceful and unusual courtesies extended to the delegates to the National Wholesale Druggists' Convention, held from October 1 to 8, at Delmonico's, was the sending of complimentary passes to all delegates and their wives and daughters and sisters who accompanied them for the entire week of the convention, by the Railway Advertising Company, of which ex-Mayor Hugh Grant is president, W. J. K. Kenney secretary and Mr. A. J. Johnson agent.

The passes were most attractively arranged in the form of tiny scarlet booklets and contained coupons enough to satisfy the most indefatigable of sight-seers.

All about the city during convention week, which is a gala season in the case of this very prosperous organization, the little red books bearing the stamp in gold letters of the freedom of the city—so far as the Railway Advertising Company could grant it—were in constant evidence on cable and all other cars controlled by the Railway Advertising Company.

Mrs. Harriet Hubbard Ayer, by the bye, is the only feminine member of the Wholesale Druggists' Association. Mrs. Ayer is also the one New Yorker who was favored with one of the little red books—the first pass issued bearing that lady's well-known name.

If the officers of the Railway Advertising Company could have heard all the complimentary and appreciative remarks relating to their unexpected civility by not only the delegates, but the pretty women and girls who came with them to the metropolis, they would have been amply repaid.

THE COURSE OF TRUE LOVE.

An interesting sequel to the story of the clandestine marriage of young Andrew White Brown, son of Lyman Brown, of "Paskola" and "Mother Slegel's Syrup" fame with Maude Ray Barnes, of Fulton, niece of Smith Corde, a wealthy manufacturer of Oswego, was the arrest of Lyman Brown in Montreal on October 4. In June last young Brown was suddenly arrested on a charge of having refused to support his young wife, although able to do so, and fined \$50 and the heavy costs of the proceedings.

The civil law of the Province of Quebec contains among its provisions a clause that fathers-in-law are responsible for the support and maintenance of their daughters-in-law who are without means, and Mr. Brown on returning to his office from luncheon was greatly astonished to have a sheriff's officer hand him a writ of the Superior Court and a statement of claim from McGibbon & Davidson, who have throughout acted for Mrs. Brown, claiming \$150 per month alimony.

Application was made to the Recorder of the city, the Chevalier de Montigny, who issued a warrant and the officers of the law went in search of the millionaire manufacturer, who was shortly afterward arrested and brought before the Recorder.

Ex-Detective Grose and Charles G. Glass became bondsmen for his appearance in the Recorder's court next day.

A STORE IN LITIGATION.

The possession of a drug store at 580 Amsterdam avenue has caused a legal warfare between George T. Hanning, Philip Grassmuck and Mary Ebmer on one side, and Peter Henckel on the other. Henckel's lawyer applied to Judge Conlon of the City Court for an injunction to restrain the others from interfering with Henckel's management of the drug store. He termed the action of the defendants in interfering with his client as "larceny under the guise of civil process." The drug store until a month ago belonged to Grassmuck. Frederick Hutner secured a judgment of \$500 against Grassmuck in the City Court, and the store was seized and sold by the sheriff. It passed through several hands, and finally came into the hands of Henckel. Mrs. Mary Ebmer then came forward and claimed that she had secured judgment against Grassmuck previous to the one secured by Hutner. George T. muck's property at Mrs. Ebmer's request. When he attempted to take possession of the drug store he found Henckel in charge. Henckel was put out, but subsequently came to the store and let himself in with a key. Hanning and a policeman ejected Henckel. The judge would not grant the injunction, but ordered the defendants to show cause why they should not be enjoined from interfering with Henckel.

MASSACHUSETTS.

Boston, Oct. 20.—The history of this State discloses no instance of the prostitution of a sixth-class license similar to that just brought to light in Fall River. In this particular case the drug trade cannot be made to shoulder the disgrace; the blame lies wholly in the direction of the licensing board—the aldermen of that city—who made use of this permit to accomplish their nefarious schemes. The unearthing of this illegal affair is a part of the good work which our board of pharmacy is at present accomplishing, and is a portion of the fruit borne of the appropriation given to the board at the last session of the legislature, for the enforcement of the laws under which it acts.

THE FACTS IN THE CASE.

Now for facts: Jeremiah Brown's "drug store" was until the 5th inst. located at Fall River on South Main street. Brown, it seems, had sold liquor at this place as a wholesaler for fully twenty years. It is also said that of the kind his was a model place. He never sold liquor to be drunk on the premises, invariably closed his place at 9 o'clock in the evening, and under no circumstances kept illegal hours. The place was noted throughout the section as a store where liquors were sold for "family use."

HOW THE DRUGGIST'S LICENSE WAS PROCURED.

Up to the present year Brown had always procured his license without any particular trouble, and early in the license year he filed the usual application. On the day upon which the licenses were being considered, Brown's application was acted upon favorably, but after the aldermen had commenced final action it was found that his license had been set aside to make room for another man. This caused considerable disapproval and a movement was immediately commenced which ended in Brown's securing a druggist's license costing \$1, with the understanding, so it is believed, that Brown should go on selling by wholesale as if he had received the \$1,500 license for which he was slated. Agent Harris, who has charge of this work for the board, visited Fall River, with the result that the shop is now closed and prosecution may follow.

ANOTHER CASE.

Another case which received later consideration than the one above mentioned, is that of a Lowell drug clerk who ran a store for an unregistered man. The main business of this establishment was violating the liquor law, and the opportunities were frequent. The clerk was summoned before the board and at the hearing which followed his guilt was evident, and such was the verdict of the board. As the clerk depended on the certificate for a livelihood, the board decided to show leniency in the case, and so the offender was deprived of his certificate for a term of only three months.

PAINT, OIL AND VARNISH CONVENTION.

The annual convention of the National Paint, Oil, and Varnish Association was held in this city on the 9th, 10th, and 11th inst. Several business sessions were held, these were interspersed with visits to the many places of historic interest in Boston and vicinity, which made the sojourn one of great pleasure to the many visiting delegates present. An excursion down the harbor was also a feature of the week which wound up with a banquet at the Hotel Vendome. This was graced by President-elect Vrooman, Past President

Morton, Gov. Greenhalge, President A. D. McClellan of the New England Paint and Oil Club, Senator Hoar, Rev. Dr. Edward Everett Hale, Col. Samuel E. Winslow, J. Seaver Page, O. L. Whitelaw and H. B. French. About 150 members of the association were present. Speeches were made by Governor Greenhalge, Senator Hoar, Rev. Dr. Edward Everett Hale, President-elect Vrooman, Past President Morton, Howard B. French of Philadelphia; J. Seaver Page of New York and Oscar L. Whitelaw of St. Louis.

The new officers are: President, George H. Vrooman, Chicago; first vice-president, Howard B. French, Philadelphia; second vice-president, Charles W. Barstow, St. Louis; secretary, V. Van Ness Penson, Chicago; treasurer, William Agge, Boston; auditor, S. M. Bassett, Cincinnati, O.; directors, John D. Morton, Boston; W. W. Lawrence, Pittsburg; Charles T. Pierce, New York; A. Sherwood, Cleveland, O.; W. L. Davis, Detroit, Mich.; M. J. Waugh, Lincoln, Neb.; H. D. Cutler, Kansas City, Mo.; Fred. G. Elliott, Philadelphia; W. T. Seaton, New Orleans.

BOSTON'S WORLD'S FOOD FAIR.

The World's Food Fair, which is now being held in this city is occupying considerable of the public attention. Prominent exhibitors connected with the drug trade are the Theodore Metcalf Co., and the Doliber, Goodall Co. The exhibit of the former shows the flavoring preparation of vanilla which this firm has recently placed upon the market and an opportunity is given the public to test this product, toothsome ice cream of which it is an ingredient being the vehicle. A magnificent and classic pavilion displays Mellin's food to the best advantage, but an additional feature is the excellent concerts which the firm has furnished.

A FLY PAPER INJUNCTION.

In the United States circuit court of appeals, before Judges Colt, Webb and Aldrich, Oct. 16, the case of John A. Andrew et al. against Otto Thum et al. was heard.

This was a suit in equity brought to restrain Andrew and others from infringing on sticky fly paper and machinery to manufacture the same. In the circuit court a perpetual injunction was ordered against the defendants, from which they took an appeal.

CHAIRMAN WHITNEY RE-APPOINTED.

Chairman Henry M. Whitney of the Board of Registration in Pharmacy was re-appointed by Gov. Greenhalge on Oct. 18. There was a spirited contest for the position, Worcester county presenting strongly the claims of one of the foremost pharmacists of that section. Mr. Whitney can point with pride to his supporters. Among the signers to his petition were many prominent pharmacists and citizens and we find the names of Professors Patch, Markoe and Babcock, W. F. Sawyer, Henry Canning, G. W. Cobb, N. W. Stiles, J. Allen Rice, J. H. Manning, Hon. C. B. Emerson, F. W. Reeves, The Theodore Metcalf Co., Kelley and Durkee, Melvin and Badger, C. H. Crane, Clough and Shackley, B. F. Bradbury, W. B. Hunt, E. L. Ellingwood of Lowell and all of the prominent pharmacists of that city. The indorsement by citizens was very strong, such names as Mon, John E. Russell, Hon. A. E. Pillsbury, Hon. Geo. N. Nichols and ex-representative Hutchins being on the list.

VIOLATES A LIQUOR LAW.

R. E. Congdon of Nantucket was recently charged with violating the liquor law. This was one of a series of liquor cases

against Nantucketers over which there was much excitement. After a long trial in the superior court, the case was given to the jury, which was unable to come to a decision even after an all-night session, so that the final settlement of the case is postponed until the next term of the court.

Hon. E. G. Frothingham of Haverhill has received a renomination for the senate.

NEW PHARMACISTS.

At the session of the board of registration in pharmacy, which closed Oct. 4, 34 applicants were examined, five of whom were granted certificates. The successful applicants were Allen F. Read of Pittsfield, Frank E. Wingate and Charles H. Wentworth of Boston, Thomas F. Delaney of Beverly and J. Napoleon Normand of Fall River.

HUB SPARKS.

C. Wesley Jackson, Reading, has just bought a Tufts fountain.

Lowell A. Drown is the new proprietor of the St. James Pharmacy on Washington street.

C. H. Bangs has just received the order of Chas. Ruthford of Philadelphia for mahogany fixtures.

A. F. Glessman of Lenox, is to open a new store at Holyoke and has placed an order with Bangs for fixtures.

A. W. Fairbanks' new store at Fitchburg is equipped with hot and cold fountains from the Low Art Tile Co.

William F. Grace is to open a new store on Mt. Auburn street, Cambridge; his fountain will be of the Tufts pattern.

John Macksey, James W. Tufts' popular representative, has been in Chicago for the past month, but is expected to return to this city next week.

C. J. Hackett has opened a new store on Westminster street, Providence, R. I. A prominent feature of the establishment is the fountains supplied by the Low Art Tile Co.

McDonough & Sheridan, former clerks for C. H. Guppy, Portland, Me., have opened a new store in that city. Their fountain is onyx and is from Tufts manufactory.

R. W. Walker, formerly manager of the N. Y. branch of the American Soda Fountain Company, has gone to Chicago to take charge of the new branch which has been established in that city.

C. A. Charles, secretary of the Malden Druggists' Association, has just left for a trip to North Adams and Greenfield, where he will do some organizing in the interest of the Interstate League.

The Boston office of the Low Art Tile Co. has just closed a contract with a prominent drug firm of Los Angeles, Cal., for a hot and cold soda fountain. Frank Richardson, Albany, N. Y., has secured a new cold fountain from the same source.

Scates & Co., of Saccarappa, Me., have purchased the drug store of E. H. Coddington at the corner of Merrimac and Portland streets. The new proprietors are now engaged in the work of remodeling; new doors, fixtures from C. P. Whittle & Co., and a new fountain are among the changes to be made.

Here is a list of druggists who have recently purchased hot soda fountains from the Low Art Tile Co.: Hutchinson & Co., Shawmut avenue; Maverick Drug Co., Maverick Square; Daniel Stowell, 1067 Washington street; F. E. Gaylord, 1381 Washington street, all of Boston. Other Massachusetts druggists are: G. A. Lor-

ing, Wollaston; T. F. Godfrey, Northampton; W. P. Draper, Springfield; Avenue Pharmacy, Somerville; E. Hefferman, Lynn; Allen Clark, Chelsea; J. H. Nuttall, New Bedford; Ripley & Briggs, Taunton; H. L. Green, Beverley, and J. E. Quimby, East Milton. W. H. Fogarty, New Britain, Conn., and C. E. Harkins, Portland, Me., have also followed the example of the above.

C. H. Bangs, manufacturer of drug store fixtures, Boston, has moved from 342 Washington street, to 406 Washington street, room 16.

The pharmacy on Green street, Fitchburg, formerly conducted by N. M. Deschenees, is now owned by R. E. Longtin, who purchased it recently.

H. O. Miller of the "Eastside Pharmacy," Bangor, has now added a wholesale department to his present business, he has made many alterations in his store and added more rooms. He has put in a large line of Sharp & Dohme's Pharmaceutical Preparations and is having decided success with them.

Fred Reed has bought the City Drug Store, Bangor, lately owned by B. Hexter. Mr. Reed has made many alterations, refitting it completely and placed it under the management of A. E. Felch, late of Malden, Mass., to whom great credit is due for the rearranging of the fixtures, etc., and making it look one of the prettiest drug stores in the State of Maine. Mr. Felch's Malden friends gave him a magnificent send-off, presenting him with a beautiful diamond ring.

S. D. Wiggin, of Ellsworth, Maine, is making many alterations in his store on Main street, putting in a new plate glass window, new entrance and also an entirely new window which after the extensive alterations he is making inside will make a very attractive store and will rank as one of the finest equipped drug stores in the State of Maine. Mr. Wiggin has been in business in Ellsworth for nearly thirty years and also conducts a branch store at Bar Harbor during the season.

Dr. Horace Ingersoll, who died recently at Salem, Massachusetts, at the age of 83, had a varied career, having at one time or another tried each of the three learned professions. He was probably the last survivor of the coterie of which Nathaniel Hawthorne was the leading spirit. It was Ingersoll who suggested to Hawthorne the idea which found embodiment in "The Scarlet Letter." It was from his lips also that Longfellow heard the story which the poet wove into "Evangeline." Ingersoll had previously told it to Hawthorne, who, however, dallied so long over a novel founded on the incidents that the doctor gave it to Longfellow. Hawthorne was greatly annoyed at being forestalled, but Ingersoll used to add, when speaking of the matter, "I can't help that; I gave him six years."

THE TITLE STATE ASSAYER.

Recent interests in the quality of dairy products and other articles of domestic food and use has raised the question as to the title, "state assayer," which has been in quite common use in this State.

It appears that the public statutes, chap. 60, secs. 64, 65, provided for the appointment of certain persons as "assayers of ores and metals," but these sections were repealed by the last legislature (chap. 111, sec. 94). There was never, therefore, an office of "state assayer," and the title, even if limited to "ores and metals," has no longer any official sanction, nor excuse for use.

Special Meeting of the Apothecaries' Guild.

A special meeting of the Apothecaries' Guild of Boston and Vicinity was held on Oct. 19. It was called for the purpose of presenting a report of the successful organizing trip to New York and Brooklyn; to take action relative to inducing proprietors and jobbers to now adopt the League plan, and to listen to letters from wholesale druggists of this city regarding the matter of retailing.

President Stiles occupied the chair. Secretary Reeves read the minutes of the last meeting which contained a resolution—a copy of which had been sent to each wholesaler of the city—to the effect that the Guild deemed the retailing of drugs by wholesalers detrimental to the interests of the retail trade and requesting a discontinuance of the practice.

NO GOODS AT RETAIL BY JOBBERS.

Replies were received from four firms. West & Jenney sympathized with the resolutions and stated that they had never conducted a retail business. Cutler Bros. gave their hearty endorsement to the idea. They had not sold at retail for years and large placards with "No Goods at Retail" were conspicuously displayed in their store.

Gilman Bros., and Carter, Carter & Kilham replied in the same tenor; the former had discontinued on January 11, and the latter about the same time and before the receipt of the request. Secretary Reeves stated that the resolution had been adopted by the Winchester, Woburn and Stoneham Association, the Brighton and Alston Association and the Cambridge and Somerville Association. Four of the wholesalers had not replied. Some of them have referred to it as "Reeves' scheme," said the speaker, and have said that when they hear from the majority of the retailers they would stop retailing. At a meeting of the Cambridge and Somerville Association a vote was passed to cease buying from retailing wholesalers. President Stiles stated that one of the firms made no reply through misunderstanding the matter. This firm had, however, discontinued allowing their employees to sell to their friends, and had also offered to forfeit \$10 to any one who could prove that they retail for less than full price. S. A. D. Sheppard believed the matter worthy of further consideration and that the resolutions should be renewed to those wholesalers who had not replied.

President Stiles was of the opinion that better results would be attained by a committee through general interviews than by letter. This was opposed by Mr. Sheppard, who then made a motion that the resolutions be renewed by letter. Mr. Howard of Medford, related a personal experience with a retailing wholesaler, and who as a class, he said, would not stop selling until forced to do so. Secretary Reeves spoke in a like view and then Mr. Sheppard's resolution was unanimously adopted.

THE MASS MEETING IN NEW YORK.

President Canning gave the result of the organizing trip to New York and Brooklyn which he styled as a "flattering success." He traced the inception of the plan from a meeting of the Executive Committee of the Guild at which time he asked for four canvassers to do the work. Volunteers responded, "four good true and well tried men, Messrs. Stiles, Reeves, Cobb and Charles." He praised the officers of the New York branch for their efforts. A repetition of history was seen in their not being wholly successful; it was because the league plan was not fully understood and which is often better presented by strangers. He

related the experiences of his trip to New York to attend a meeting of that branch before the canvassers had stirred up enthusiasm. He was of the opinion then as now, that if New York, would not come into the League the movement had better stop and if that city could be secured it would be a great step towards organizing the whole country. His statement of Mr. Reeves' experience in calling on 70 druggists of that city in one day and securing the signatures of 68 was vigorously applauded.

THE POSITION OF THE PROPRIETORS.

President Canning then turned to the meetings of the Proprietors' Association, where he was not so successful. He detailed how he informed the members at the first meeting that he should ask to be heard at the second, and how the life of the League might depend on the result. The "privilege of the floor was granted at the second meeting, if there was no objection," said the speaker. He then spoke of the rebuffs with which his questions were received as to how far organization would have to be carried before the proprietors would put the agreement in force, and whether or not they were willing to contribute toward organizing the balance of the trade, and of the motion to adjourn, which was carried while he was still speaking. "I have always maintained that the proprietors must be compelled to come in," said the speaker, who then referred to the meeting of retailers, which was held after the mass meeting, and which he attended. The New York retailers were not discouraged at the reception accorded their representative by the Proprietors' Association, but on the contrary, felt that they must work harder than ever. Each proprietor could do much to help, but their reception demonstrated that we may expect no sympathy from that quarter; they will not do anything until forced. Four proprietors, however, had stated that they would contribute, and it was worth while to ask them individually.

Hon. C. B. Emerson of Haverhill desired to know how long it would be before some benefit would be received.

In reply President Canning spoke of the benefits which were already being received by local associations in other quarters and said that in his opinion it would not be necessary to wait for 80 per cent. of the trade to organize; we need not wait simply because the proprietors say so. He thought there was sufficient organization now for some far-seeing proprietor to take hold of the matter. The department stores in New York, and this city, now have non-secret preparations, which is another lever to bring to bear upon the proprietors.

SECRETARY REEVES' IN NEW YORK.

Secretary Reeves then related some of his experience in New York, and the self-sacrificing enthusiasm shown in assisting him there. He also said that the work of organizing New England had been practically in the hands of five men and asked pertinently why others did not show like interest. He spoke of the success of the local associations in Worcester, Lowell, Leominster. He had collected \$200 for the League and desired others to show like activity. Each one should take it upon himself to be an organizer; don't wait to be asked but organize your district. He spoke of an idea conceived by Mr. Charles of Malden since the reception by the Proprietors' Association, that of returning free advertising matter to proprietors; putting their goods behind the counter and assisting no more in advertising them. President Canning approved of this plan. Return all advertising matter and state that

no more will be received. This could be done very easily. President Stiles then read the following letter which it is proposed to send to every proprietor in the country. It was warmly commended by Messrs. Canning, Sheppard, Cobb and Flynn and then unanimously adopted:

A LETTER TO PROPRIETORS.

BOSTON, Mass., October 20, 1894.

Messrs. —:

DEAR SIR—At the regular meeting of the Boston Branch of the "I. R. D. L." held at Garfield Hall in this city Friday P. M. Oct. 19, 1894, the following resolution was unanimously passed:

WHEREAS, We have succeeded in organizing under the League Plan the entire New England States to the required 80 per cent. or more, New York city and Brooklyn to about 75 per cent., with an assurance of the other 5 per cent. in the immediate future, and

WHEREAS, The plan contemplates protection to even a local section when organized to the 80 per cent. Therefore be it

Resolved, That in our judgment the time has now arrived when all Proprietary Medicine Manufacturers of the United States who approve of the plan should immediately adopt it; commence to mark their goods and carry out the details of the plan in good faith and thus do their part to afford the relief and benefit it contemplates and which is so urgently demanded from all sections of our country.

The above resolution was passed in consideration of the following facts:

From past experience the promulgators of the league interests have become convinced that a plan of this kind, in order to be successful, must combine the pecuniary interests and good will of the three interested branches of the trade, and have pressed the work of organizing with the utmost confidence, upon the general understanding that both proprietors and jobbers generally approved of the plan and with the firm belief that it embodies the mutual interests of the three interested parties to the greatest possible extent.

Thus far the organizing has been done almost wholly by volunteer unpaid work, necessitated by lack of finance which we cannot expect to be able to continue beyond New England, and now if proprietors persist in not adopting the plan until the whole country becomes organized to 80 per cent. in accordance with action at their convention in New York city, October 8d, and the task should prove too great for the retail fraternity alone, the first redress would be to discontinue the distribution of all proprietary medicine advertisements and press the sale of their own preparations which in our estimation would mean improved condition of the retailer at the expense of the proprietor. This condition of affairs would mean direct controversy between the interested parties, in place of the mutual aid and harmony the league plan contemplates.

Of course a plan, no matter how wise its construction, cannot be made effectual in controlling the great evil in question without a thorough organization of the retail forces to support it. That we now have in the League organization a condition never before offered the proprietor and should not now be cast aside without your thorough and mature consideration.

Were it made possible for us to announce to the organized forces of the New England States, New York city and Brooklyn that any one or more proprietors had now adopted the plan and were putting it in operation in good faith, do you not believe it would give their preparations a boom with the trade that much judicious advertising along the ordinary lines would utterly fail in doing? We believe it would.

Therefore if the league plan is just and wise, would it not be well to adopt it now while it is succeeding and if any lingering doubt remains in your mind as to its

ultimate success, come forward and offer the promulgators financial aid proportionate to the benefits that will result in its success, for success would be assured if a reasonable amount of money could be placed at the disposal of the League now at the opportune time.

We can satisfy any reasonable mind, from the record of what we have done that we can complete the organization of this country in six months time if we had sufficient of that one lacking element at our disposal, and the aggregate amount need not be large, either.

We firmly believe that no action would better beget a complete organization of the League throughout this country than for proprietors to adopt the plan at once.

As we wish to know the actual situation before the annual meeting of the League, which will be called soon, will you please reply at your earliest convenience telling us whether you approve of the plan and whether you think as we claim, that it embodies the mutual interests of all three parties concerned.

If your decision is in the affirmative and you think the proper time for adopting the plan has arrived, we shall be pleased to have you emphasize your decision by naming the amount of financial aid you are now willing to contribute to insure the perfect and permanent success of the enterprise. Notify the president of the League, Mr. Henry Canning, 109 Green street, Boston, as to what you are willing to subscribe to the organizing fund.

Signed

N. W. STILES,

President Apothecaries' Guild of Boston and Vicinity.

F. W. REEVES,

Secretary Apothecaries' Guild of Boston and Vicinity.

We, the undersigned, hereby indorse the foregoing:

HENRY CANNING,

President Interstate Retail Druggists' League.

GEO. W. COBB,

President New England Retail Druggists' Union (representing all the New England local organizations).

C. P. FLYNN,

Secretary New England Retail Druggists' Union.

A. M. RONTY,

President New York City Branch Interstate Retail Druggists' League.

R. C. WERNER,

President of the Brooklyn Branch of the Interstate Retail Druggists' League.

PENNSYLVANIA.

PHILADELPHIA, October 20.—The tax-free alcohol problem has been grabbed by the horns by the local retail trade. They say they are compelled to move in the matter in self-defense, or their interests will suffer while those of the large manufacturers and of the wholesalers flourish abnormally. Representative pharmacists met at the Philadelphia College of Pharmacy on October 17 and took action on the matter. It was stated that the manufacturing chemists and the wholesale druggists had consulted with the Secretary of the Treasury in regard to the Government's helplessness to enforce the new law bearing on the sale of alcohol, and that they spoke for themselves alone. Their only interest in the retail pharmacist, it was said, is to sell him goods.

TO AROUSE THE RETAIL TRADE.

The result of the meeting was that a committee composed of George M. Beringer, chairman, R. P. Marshal, William McIntire, Joseph W. England and

Robert England was appointed to take the subject in hand. The support of the 40,000 retail druggists in the country will be enlisted by a circular letter to be published shortly. Congressmen will be called on and shown the object of the agitation, and it is probable, a Philadelphia committee will visit Washington and have a conference with Secretary Carlisle.

Edwin M. Boring presided at the meeting. Thomas S. Weigand was secretary. The alcohol question was brought up for discussion after Mr. Joseph W. England's paper on "Tax-Free Alcohol" had been read. The following resolutions, offered by Robert England, and seconded by Mr. G. M. Beringer, were adopted:

WHEREAS, Alcohol enters so largely into the making of medicinal preparations, is at present of such excessive cost due to the continuance of an internal revenue tax which results in making a product worth but 53 cents a gallon cost \$2.50, and its lessened cost would be of great benefit to the public and pharmacist alike, and,

WHEREAS, Congress at its last session passed the Hoar bill, making alcohol tax-free when used for manufacturing medicinal preparations, after regulations to be prescribed by the secretary of the treasury had been satisfactorily complied with, and,

WHEREAS, These regulations have not been issued and, it is believed, will not be, on the ground that the law is defective, and that Congress has failed to provide sufficient funds to carry it into effect, Therefore be it,

Resolved, That we, the members of the Philadelphia College of Pharmacy, in pharmaceutical meeting assembled, place ourselves on record as favoring tax-free alcohol for manufacturing and medicinal preparations, believing that practical regulations can be devised whereby the government can be adequately protected against fraud, and pharmacists, and indirectly the public be given the almost priceless boon of tax-free alcohol, and be it further

Resolved, That we urge the pharmacists of Philadelphia and of the country at large to earnestly appeal to their Congressional representatives to not present at their next session the repeal of the law, but to amend if necessary, and to pass, if needed, a sufficient appropriation to put it into effect.

THE ACTION OF THE AMERICAN PHARMACEUTICAL ASSOCIATION CRITICISED.

Some criticism of the American Pharmaceutical Association's action at Asheville was expressed. That body voted against the enforcement of the law. Professor Trimble said that it was one of the worst cases of being frightened on record.

Mr. England's paper reviewed the alcohol question at length. In part he said:

"It is believed that practicable regulations could be devised for the use of tax-free alcohol in the making of non-proprietary medicinal preparations without loss of legitimate revenue to the Government by fraud, through regulations somewhat analogous to those of the present revenue statutes, No. 8297, providing for the withdrawal of alcohol from bond, free of tax for scientific purposes.

DRUG STORES AS SALOONS.

"It is claimed that one of the results of tax free alcohol would be the creation of liquor mills under the guise of drug stores and the bringing into public reproach of the practice of pharmacy. It is not believed that any number of those already in business would so prostitute themselves, while the general existence of good State pharmaceutical laws and State boards form a bulwark against the incursion of incompetent persons into the ranks of pharmacists.

"New regulations for the use of tax free alcohol in the making of official and unofficial non-proprietary medicinal preparations could doubtless be framed on the lines of this act. Some of the essential details might be: a listing on the books of the Internal Revenue Department as a manufacturer; the purchase of tax-paid alcohol through a bonded warehouse in lots of not less than one barrel; the filing of 'application' and 'bond' for use of same as tax-free alcohol; no retailing of alcohol as such

nor use of same in making such non-proprietary preparations as the Revenue Department may regard as alcoholic beverages; and, after the alcohol has been used, the presentation of the barrel stamps to the Revenue Department with a sworn record of preparations made and quantities for rebate of tax and cancellation of bond.

PATENT MEDICINES.

"There is a possible danger in tax-free alcohol to the retail pharmacist and this is that manufacturing pharmacists may see fit to so cheapen non-proprietary pharmaceutical preparations that the former may be tempted to buy them rather than make them himself. But, on the other hand, the amount of increased capital necessary to get tax-free alcohol being so small (not more than \$100 or so for each barrel), and the possible savings so great (nearly 400 per cent.), it is much more probable that retail pharmacists may be induced to enter extensively into the manufacture of their own preparations, something they have not done in recent years; and if this shall result legitimate pharmacy will score a great advance.

"By far the greatest risk of fraud upon the Government with tax-free alcohol, lies in the direction of the proprietary or secret medicinal preparations, commonly referred to as nostrums, and sold by druggists, grocers and department stores. If the privilege of cheap alcohol was given unrestricted effect, the markets would soon be flooded with a host of bitters, tonics, stomachics, cordials, etc., which would be nothing more nor less than alcoholic beverages. There is but one way to deal with an unknown and uncertain danger like this, and that is a radical one. Require manufacturers of proprietary medicinal preparations wishing tax-free alcohol, to present the working formulas of their preparations, and the percentage of contained alcohol in the finished products, to the secretary of the treasury (or commissioner of internal revenue), and if in his opinion the preparations are not alcoholic beverages in the sense of the law, then permission shall be granted to use tax-free alcohol in the making of them under proper restrictions.

"If it were found by analysis that a formula given was false, or that it was altered afterward without the approval of the Internal Revenue Department, adequate penalties, such as forfeiture of bond, publication of formula, and subsequent classification of the preparation as an alcoholic beverage, could be enforced. On the other hand, protection could be given to the manufacturer by the government, that his formula would not be made public in the absence of violation of regulations. In this way the maker of proprietary medicinal preparations not usable for alcoholic beverages, could be granted the privileges of the new law, while the government could be protected against fraud."

MEMORIES OF THE DELMONICO MEETING.

The chief topic of conversation of the wholesale druggists is in reference to the good time they had in New York while attending the annual meeting of the N. W. D. A. They are all of a unit in regard as to how the New Yorkers treated them, and if the session had continued much longer many of them would have to go into retirement until they had recovered their old-time appearance. Mr. Busch, of the firm of Shoemaker & Busch, in speaking of the trip said: "The trouble I had was knowing how to refuse the many offers to banquets, and I consider the biggest feature of the week was the lunch given on board the steamship Sandy Hook. At this lunch there were covers laid for 525 people, and the committee that had the matter in

charge had some trouble in securing a boat with a saloon large enough to accommodate all that were invited.

"The chief event of the meeting was the confirmation of the rebate plan, to make it more binding, the maintaining of it and the strengthening of the plan. It is contended that if the retailers wish to help to eradicate this evil they must organize and then come to the jobbers whenever they find that a certain house is cutting prices, and in this way such houses can be prevented from securing the articles which they have been selling below the circular price."

In regard to the general condition of business, Shoemaker & Busch report it better than it was last Fall and beyond what they had expected. The orders are for the most part in small quantities, which keeps them busy. At the present time this firm has nine men out on the road.

THE APOTHECARIES' UNION.

Owing to this letter being written on the 21st inst. it is impossible to state what the outcome of the meeting of the members of the Apothecaries' Union will be which takes place on the 23rd. The subject that will be up for discussion will be the policy of changing the name of the organization. It is thought that such will be the case, as many of the members are desirous of having the association change its name.

A CIRCULAR FROM THE PROPRIETARY COMMITTEE.

The Proprietary Committee of the N. W. D. A. has just issued a circular to all rebate proprietors and members of the N. W. D. A. calling their attention to what was done at the meeting of the Association. In it special attention is called to the 4th resolution, which is as follows:

Resolved, That our Committee on Proprietary Goods be requested to revise the list of dealers entitled to wholesale agencies under the foregoing resolution, and that proprietors who have not already done so, will again be urged to furnish a list of their quantity buyers, so as to make this list complete; which list after being accepted by a similar committee from the Proprietary Association, shall control transactions under proprietors' contracts, and no order shall be accepted by proprietors at a discount from dealers not on this list, until passed upon by the representatives of the above-named committee.

It is the intention of the committee to crush the cutting evil, and M. N. Kline, the chairman, in the report says:

"We are glad to be able to acknowledge the cheerful and hearty co-operation with the efforts to prevent that concern from obtaining your preparations to be sold in violation of your terms, and to say that if this co-operation is continued, we feel sure of the success of our efforts to secure a full compliance by all parties to your prices and terms.

"There is just one feature of our work which has hitherto been lacking in proper support, and this Committee trusts that the fuller understanding, obtained through the report and the discussions at the New York meeting, will bring about a marked improvement in this particular. I refer to the fact that some proprietors do not appear to act upon the reports of this Committee concerning parties who make shipments to Park in violation of their terms. I reiterate what was stated in my report.

"No report was made to proprietors, placing any dealer on the list of parties supplying the Cincinnati concern, until the matter was thoroughly investigated, and unmistakable proof of the correctness of our charges was in our possession. If some influence can go out from this meeting which will result in the prominent proprietors accepting in good faith the letter and spirit of the Detroit Plan, at least so

far as to be firm in their position of not filling orders from parties against whom information is lodged by this Committee, the success of our efforts will be more complete. The fact is, that but one course should be taken with those who were found to supply the Cincinnati cutter—they should absolutely be refused further shipments until this Committee had been thoroughly satisfied that the conditions of the contracts would in future be adhered to. It certainly is no credit to the proprietor to have him announce certain conditions as following the sale of his preparations, and then be unwilling to take this step, to convince buyers that his terms mean precisely what they say, and cannot be violated with impunity.

"If you will give us the fullest confidence in this regard, refuse absolutely any shipments whatever to any party reported by this Committee, until such party has satisfied you, *through this Committee*, that they will discontinue the practice complained of, we will have such a prompt and immediate change in the situation of affairs, as will, we feel confident, result in very much less interference with the free course of your business than we can possibly have under the half-hearted support received from some hitherto. When it is once realized that dealers cannot trifle with your terms, they will be strictly adhered to, and the difficulties will quickly diminish, if they do not altogether disappear.

"We propose to continue the active, aggressive work inaugurated last year, and shall ask the hearty support of all proprietors and all dealers, to the end that the Rebate System may be even more firmly established than it ever has been heretofore."

THE MEDICUS BICYCLE CLUB.

The Medicus Bicycle Club is in earnest about securing a house for itself. A number have been visited and it is thought that before many days that one will be selected. W. F. Steinmetz has taken a great interest in this movement, and he is giving much of his time to securing the building. When the site or the building is finally agreed upon, it is the intention of the Board of Managers to fit it up in a grand style. Besides being a house where all the conveniences that a club man likes, there will in all probability be a gymnasium, with a bowling alley included, and it is thought that if there should happen to be any good bowlers in the club a match can be arranged with the New York druggist bowlers. That is for a series of games in both cities, and in this way the druggists of the two cities can be brought into closer touch.

CITY NEWS NOTES.

Rush P. Marshall, who has been sojourning at Princess Anne, Md., has returned to business once more.

W. H. Llewellyn, the well-known Philadelphia druggist, can be seen any fine day taking a stroll in West Fairmount Park.

W. C. Pechin, Second and Columbia avenues, is preparing for a large output this winter of his famous preparation, "Kosmo Cream."

W. F. Ridgway has returned from Atlantic City, and he has accepted a position as head clerk with E. M. Platt, 36th and Sansom streets.

M. Clarence Campbell, Eighteenth and Market streets, has been absent from Philadelphia for a few days, attending the wedding of his sister.

R. B. Scott, who conducts the drug store at Twelfth and Poplar streets, has had the interior of his store renovated and new fixtures placed therein.

Robert Shoemaker & Co., the wholesale druggists at Race and Fourth streets, have been elected to membership in the Philadelphia Board of Trade.

Mr. Miles, head clerk at Hillan's, Thirteenth and Market streets for many years, has accepted a position as apothecary in the Navy, securing it by competitive examination.

At the foot ball match held in this city on Wednesday, October 17, between the University of Pennsylvania and the Lehigh College teams, the druggists and doctors were well represented.

Dr. A. T. Pollard, who has been rusticated in the wilds of Maine, has returned to his store at 11th and Locust streets. He had a very pleasant time and the trip did him an immense amount of good.

M. N. Kline, during the week of October 7, spent three days in Washington attending the meeting of the Brotherhood of St. Andrew. He had a very delightful time and thoroughly enjoyed the session.

W. E. Neville, late with Whitall, Tatum & Co., is now employed with John M. Maris & Co. Mr. Neville has charge of the business throughout the State of Pennsylvania and a portion of Philadelphia.

Mrs. William Warner, the wife of the senior member of the firm of Wm. Warner & Co., died last week after a short illness. Mrs. Warner was a devoted mother and her loss is mourned by all those who knew her.

Prof. Joseph P. Remington, dean of the Philadelphia College of Pharmacy, was one of the speakers at the Y. M. C. A. reception to College students given last week. He talked in an entertaining and practical manner, just as he does when lecturing on pharmacy.

Notwithstanding the attempts made to suppress the cutting of rates every now and then a new store in a different location breaks out. The last place which is afflicted with this kind of a house is Wilkesbarre, where the American Drug Company has just opened a store. This city has been free from cutters until now, and there will be an attempt made to keep it within the charmed circle.

The Zeta Phi Society of the Philadelphia College of Pharmacy has been organized with the election of the following officers: W. E. Porter, Pennsylvania president; Harry H. Kline, Pennsylvania vice president; Arthur R. Lewis, Texas, secretary, and Walter W. Wakon, Pennsylvania, treasurer. The executive committee is composed of D. L. Gilluawalt, William Ball, and W. L. Bucher of Pennsylvania; Max Mories, Georgia; W. F. Ridgway, Washington.

Both the allopathic and the homeopathic boards of State Medical Examiners have been in session here this week. Four days were consumed in finding out what applicants for license to practice medicine knew about physiology, pathology, diagnosis, hygiene, anatomy, surgery, obstetrics, chemistry, and the practice of therapeutics. The allopathic board was formed by Dr. McCormick, Williamsport; Dr. Beastes, Dr. Hulchigen and Dr. Latta, Philadelphia; Dr. Forster, Pittsburg; Dr. Silliman, Erie; Dr. Kline, Greensburg. The homeopaths were Dr. Middleton, Dr. Korndorfer and Dr. Crunch, Philadelphia; Cranch, Erie; Pitcairn, Harrisburg; Dr. Cooper, Pittsburg. The allopaths who applied for examination were 34 in number, and the homeopaths, 5.

The fact that William C. Kelly, a well known Chester druggist, has been afflicted with a furuncle or boil on the back

of his neck for the past ten days, has caused the Chester Times to wax factious at the expense both of Mr. Kelly and medical orthography. It says: "Druggist William C. Kelly has been nursing a peruncutus on the back of his neck for the past ten days. The thing is not as lively now as it was, but Mr. Kelly says it is getting in some sore licks yet. A peruncutus is vulgarly called a boll." The enterprising reporter has probably built up the new word "peruncutus" from the Latin perunctio, inunction; but a protest should be entered against the use of such a strange compound for a simple boll.

MARYLAND.

BALTIMORE, October 20.—All Baltimore seems to be anxious as to which section of the city is to be favored as the site of the Centennial Exposition to be held in '97. The exposition will be commemorative of the incorporation of Baltimore as a city and promises to be a grand success. The two sites that at present seem to be in the lead are Patterson Park in the eastern section and Clifton, in the northeastern section. The Business Men's Association in each section are lauding their respective sections with great vigor and the rivalry between the two has become quite interesting. Patterson Park seems to be the most natural site for such an exposition; it is of a commanding position overlooking the harbor and on account of its proximity to the water, and already having two large lakes, will be very advantageous in getting up the large aquatic exhibit which is to be a feature of the exposition; it is also very convenient to nearly all the car lines in the city and could be adapted to the needs of the exhibit with less expense than any other. Clifton is being lauded as the country seat of the late Johns Hopkins, the renowned philanthropist, and was intended by him as the site for the University, and it is still thought an imposition by many citizens of Baltimore that the directors of the University fund thought otherwise. The number of pharmacists who are on the committees of the Business Men's Association is noticeable.

NEWS NOTES.

Elmer E. Moyer has opened a pharmacy at the corner of Biddle and Greenmount avenues.

Chas. A. Pfeiffer has bought of Fred. A. Otto, his pharmacy at the corner of Greenmount and Harford avenues.

Wm. H. Dull has disposed of his pharmacy, at the corner of Division and Laurens streets, to Dr. Clarence Downes.

Paul C. E. Hauser, late registered assistant at the Altamont Pharmacy has purchased the pharmacy of M. S. Kahn at the corner of Fayette and Poppleton streets.

Berthier McClure has sold his pharmacy on Eutaw street near Franklin and returned to Philadelphia. It is now being conducted by Leander Neal, formerly with R. Lauterbach.

Jas. G. Boyd, recent manager of the pharmacy, 2331 Barclay street has been engaged to conduct the business at the corner of Harrison and Baltimore streets, of which Dr. Sudler is the proprietor.

The Class of '95, Maryland College of Pharmacy, has elected the following officers: L. C. Raiford of Virginia, president; John L. Godwin of Tennessee, first vice-president; J. P. Monroe, second vice-president; Mr. Loveland of Pennsylvania, secretary; and Wm. C. Powell, treasurer.

WESTERN PENNSYLVANIA.

PITTSBURG, Pa., Oct. 18.—The aspect of trade in this section is not encouraging. There was a temporary spurt in business circles, caused by the passage of the Tariff bill and the consequent replenishing of stocks that had been allowed to run out in view of being replaced at lesser prices than had prevailed. This over, the reaction has brought us to the normal level of business for the year, which has barely paid expenses. There is nothing favorable in the outlook for the winter except that the gloomy features of last winter's experience are not likely to be repeated in the coming one, fewer men in the laboring classes being without work.

All hopes are now fixed upon a spring revival, and it is to be hoped that anticipations may be realized, otherwise many among the smaller dealers will "go to the wall."

THE DEPARTMENT STORES CUTTING PRICES

The department stores have played havoc with the patent medicine trade here. One of the principal offenders, Messrs. Fleischman Bros., who figured largely in the demoralization of prices, has "gone by the board," but one of the partners in the concern is now running a patent medicine depot at cut prices, depending upon quick sales to carry him through. The retail druggists are fighting him with his own weapons, and we think successfully, the principal retailers in his vicinity having cut prices to as low or less a figure than he quotes. It is only a matter of time until he succumbs, as he has but limited capital and is unable to advertise as widely as the firm did before they failed.

One result of this controversy, however, is certain; that full retail prices can never again be obtained for popular advertised patent medicines.

"NON-SECRETS" AND INDIVIDUAL PREPARATIONS.

The general disposition of the trade is to run in either non-secrets or preparations of individual manufacture, and this is being done more widely than ever and greatly to the injury of the sale of well-known and largely advertised patents.

Any attempt to restore retail prices to their normal level would bring another invasion by the department stores, so that we cannot see any brighter outlook for better returns in this line.

DEATH OF A. C. HENDERSON.

Since your last issue the wholesale drug trade has suffered a severe loss in the death, by pneumonia, of A. C. Henderson, senior member of the A. C. Henderson Drug Co.

Mr. Henderson was a son of Dr. William Henderson, who established the business over forty years ago. A. C. Henderson was born in 1826 and became identified with the firm under the style of J. Henderson & Bro. at the death of Jos. Henderson. The business was carried on by A. C. Henderson in his own name until about a year ago, when it was incorporated under the name of A. C. Henderson Drug Co. Mr. Henderson leaves a wife and two children, one of whom, Chas. Henderson, is connected with the firm and will assist his mother, who has marked business ability, in carrying on the business as usual under the same firm name at the same location.

IN AND AROUND PITTSBURG.

W. F. Pauly & Co. have established a new drug store at Apollo, Pa.

T. R. Wering, formerly with Harry L. Greer of Greensburg, has bought out J. J. Keil, Sharpsburg.

The Columbian Pharmacy, Bentler street near Fifty-second, was bought in by F. Stuesser and recently sold to Mr. Herman.

J. F. Gordon & Co., Rochester, have dissolved partnership. W. F. Gordon continues the business at the old stand and the retiring partner, J. F. Gordon, has opened a new store in another part of the town.

Congratulations are in order with D. H. Wuller, the well-known Butler druggist. We understand he "struck oil" to the extent of 100 barrels per day in one of his new ventures in the petroleum oil field.

J. F. Caldwell, who has been established on Butler street near Fifty-fourth street, has opened an additional store on Thirty-third street. We understand the new venture bids fair to become a good paying investment, business having been brisk from the start.

Our genial friend Jas. M. Esler, the popular druggist of Barentum, paid a visit to the city during the past week. He complains somewhat about the state of trade, but as he is blessed with an optimistic nature he is never anything but hopeful for the future.

Geo. S. Douthell, druggist, corner of Penn and Hiland avenues, has been closed by the sheriff on executions amounting to over \$8,700. His debts all told will amount to over \$10,000. The store has been bought in by Hugh Ferguson and J. W. Fleming and is now run by Mr. Douthell as manager.

Philip Knapp of Sewickley has at last moved into his new store. This is a very beautifully arranged store in the latest style of drug architecture, possessing the finest show windows in the town. Mr. Knapp deserves to succeed, having devoted strict attention to business from the start and building up a successful trade against strong opposition.

We regret to learn of the dangerous illness of Jno. S. Shaffer of Homestead. Mr. Shaffer formerly carried on a successful business in Elizabeth, Pa., but for the past seven or eight years has been located in Homestead. His son, during Mr. Shaffer's long illness, has had charge of the store. We hope a favorable turn may occur, although it is expected to be fatal.

The elegant store of J. L. Wuller, Butler, Pa., was closed by the sheriff. The fixtures alone in this store cost more than \$8,000 and in its appointments generally was considered the finest store in Western Pennsylvania, being a marvel of well and tastefully arranged material. We understand that Dr. Johnston of the same town purchased the store and will run same, Will McCaran of Pittsburg being the assistant.

A New Building for Pittsburg College.

The proper housing of the Pittsburg College of Pharmacy, is evidently an idea that has been smoldering for some time. Pharmacists and citizens have hailed the suggestion with delight, talked it up, and, what is the most convincing proof of all, put their hands in their pockets and offered to subscribe to the good cause. Not only in the two cities, but in all towns and cities within 100 miles of Pittsburg from Johnstown the erection of a suitable building for the Pittsburg College of Pharmacy has been discussed and applauded.

"Money talks," and already substantial subscriptions have been promised to start the fund for the new building. Prof. Louis Emanuel, Ph. G., of the chair of physics and inorganic chemistry and director of the chemical laboratory, will take

ten shares at \$100 each. Dean of Faculty Julius A. Koch, Ph. G., will take another ten shares. These gentlemen wish to push on the idea to fruition as soon as possible, so Prof. Emanuel has made the following proposition:

"I am very much taken with the idea of a building for the College of Pharmacy. I will take 10 of the \$100 shares, but if three other gentlemen will subscribe \$2,500 each I will make the fourth at that sum to complete the first of \$10,000 of the fund. The idea has been simmering in the minds of Pittsburg pharmacists and citizens for some time. The late Wm. Thaw was a warm supporter of the scheme, which, however, did not come to the front in his day. Make the shares, say \$100 each, and you will find plenty of people eager to add to the column of figures that must surely grow for such a cause. A 'Druggists' Club' could also have headquarters in the building. Such an institution is very much required. I do not know positively, but I believe that Mr. F. H. Eggers, who was president of the college in 1892-93, suggested some time ago that stock be issued for this purpose, but for some unknown reason the idea was not taken up then."

Prof. Julius A. Koch, dean of faculty of the College of Pharmacy, said:

"I have conversed with a number of leading druggists and graduates of the college. It seems to me that popular subscription is the right way to success. Some definite idea of how to proceed ought at once to be decided upon. The one advanced by Prof. Emanuel has been talked of before and I think it is a good one. You can put me down for ten shares. I am unable to decide just now about being one of the four to make the \$10,000."

Following are the subscriptions so far reported:

Prof. Louis Emanuel.....	\$ 1,000
Prof. Julius A. Koch.....	1,000
Prof. E. A. Schaefer.....	1,000
President A. C. Robertson.....	1,000
Mr. John Beuter.....	100
Mr. Sam B. Dunlap.....	100
Dr. G. W. Schirmer.....	1,000
E. F. Baults.....	100
H. D. Kramer.....	100
H. M. Thompson.....	500
Hewitt & Jamison.....	500
T. E. Ihrig, Ph. D.....	1,000
A. H. Poth.....	500
Will J. Jones.....	1,000
F. A. Dittler.....	1,000
John F. Murphy.....	100
Clutton Bros.....	100
J. C. Hutton.....	100
Scott Paisley.....	100
D. C. Wallace.....	100

Total up to date.....\$10,500

OHIO.

Cincinnati, O., October 17, 1894.—Since the last issue of this journal the local druggists have been very much perturbed over the crusade of the officers of the Food and Dairy Commission. So much has been said and written about adulterated and impure goods in the local drug market that the pharmacists had good cause for their apprehension. It had been an open secret that Paskola, a preparation said to be a predigested food: coca wine, and unfermented and fermented grape juices were the products that would be analyzed by Professor Fennell. Consequently whenever a customer called for any of the above during the past few days he has been eyed with suspicion and suspected of being an agent of the Food and Dairy Commission. *The Enquirer*, the leading daily newspaper has been replete with information concerning the crusade of the Food and Dairy Com-

mission, and little surprise was occasioned when three of the best known pharmacists in the city were arrested.

ANALYSIS OF PASKOLA.

An analysis of Paskola which was made by Professor Fennell appeared in the paper mentioned above on the morning that the above mentioned arrests were made. The chemist stated that a substitute for Paskola could be produced by mixing glucose syrup with hydrochloric and sulphurous acids. The quantities given were: 1 pound of the first named substance, and a few drops of each of the acids. The last mentioned acid was added to give the product the odor of sulphur. The analysis of the coca wine developed that it contained a large percentage of alcohol, and resembled very much the red wine of commerce. The grape juices, unfermented and fermented, proved to be one-fifth alcohol. After the analytical work of Professor Fennell had been completed Assistant Food and Dairy Commissioner Luebbing appeared before Squire Philip Winkler and swore out warrants for the arrest of R. H. Weatherhead, Louis Heister, "Uncle" John Keeshan and Wilmot J. Hall. The attorneys for all the druggists save Keeshan demanded juries. The first case heard was that against Weatherhead, which was tried before twelve representative men on the 16th inst. The case was tried, however, but was continued to the 23rd. The attorneys for the defendant tried in every manner to pick flaws in the affidavit to the warrant upon which the arrest of Weatherhead was made and finally asked that the case be dismissed.

The case of the State against "Uncle" John Keeshan was called on the 17th but was also continued for several days. The same tactics were pursued as in the case of Weatherhead.

THE WINE INTERESTS AROUSED.

Several representatives of wine merchants having places in the East are here and it is said are defending the cases now pending in the courts. There is a great deal of money invested in the wine making business and the ending of these cases in the wrong way might prove a death blow to the sale of the goods in question in this market. Agents have been skirmishing to and fro to get all the information in their power in reference to the evidence to be brought out in the wine cases. They failed to get much information, however, as the officers of the food and dairy commission closed up like clams when consulted. The interest here in the outcome of these cases is intense and a large number of other prominent pharmacists are expecting to be arrested at any time. Professor Fennell has been deluged with letters during the past few days and needs the services of a small boy to open his daily mail. All the inquiries are in reference to the wine cases.

SOME "RIFF RAFF."

Ernst Pohlmeier is clerking at Otis & Co.'s pharmacy.

Karl Kuhlman is now a gilt edged zither player. At Mohawk Bridge, yes?

Harry Streithorst is said to be in the matrimonial market on account of numerous visits to the West End.

Arthur Yungblut has been appointed assistant druggist at the City Hospital to succeed Fred Roetting, resigned.

Andy Bain has settled down to business at the City Hospital and has re-arranged the apothecary shop in great shape.

Ed. Voss, the druggist at 12th and Vine streets, is said to be the best waltzer in the city. He practices at Music Verein Hall.

Wilmot J. Hall, the clever Fourth street pharmacist, returned from an Eastern trip in time to be arrested for selling Paskola.

"Uncle" John Keeshan is loud in his denunciation of the course pursued by the officers of the Food and Dairy Commission.

Miss Kathelene Mueller, the well-known lady pharmacist of Race street, is establishing a big business with the matinee girls.

Al. Boehmer has the good will of all the boys around the City building, and the City Hall pharmacy is accordingly prospering.

Notwithstanding all the promises of the attaches of the Cincinnati College of Pharmacy the Journal has not yet made its appearance.

A. J. White, president of the Paskola Company who gave a \$300,000 dormitory to Yale College dropped into town on the 18th. He was accompanied by J. B. Russell, the chemist of the Paskola concern.

Johnny Bauer, the druggist at Sycamore and Milton streets, has purchased a fine poll parrot. The bird is a beauty and can talk like a trooper. S. K. Lichtenstein, representing the Mariana Wine Company of New York is here and is stopping at the St. Nicholas Hotel. His visit is in the interest of the suit against John Keeshan, who is under arrest for selling Mariana Wine.

The Kathelene Family Circle and Story Paper made its appearance the other day. The paper is beautifully illustrated and will find its way to the homes of our best people. Miss K. Mueller, the Race street druggist, is the owner of the paper and its success is assured. Kate Field, Mrs. Frank Leslie and others of the gentler sex engaged in journalism will have to look to their laurels. The paper will be found an excellent advertising medium for local merchants.

A Syracuse drug firm is advertising for 500 pounds of ginseng root to export to China, where it is regarded as a cure-all and a charm against evil spirits. The ginseng industry, if so it may be called, has long existed in Onondaga valley. The Indians dig the root and sell it in Syracuse. The drug firm mentioned has been taking the ginseng from the Indians for many years and the sudden demand is caused by the war between Japan and China. Ginseng has been gradually ascending in price since the outbreak of the war, and as every soldier of the latter country doubtless needs a supply of the stuff to insure his safety, the demand for it in China is largely increasing.

ILLINOIS.

Chicago, Oct. 20.—While the Chicago trade is moving along the lines defined by THE DRUGGIST two months ago and gradually regaining the healthy position occupied before the depression, there is a feeling of uneasiness and uncertainty to be discerned among the wholesale dealers and jobbers. Already doubts are beginning to manifest themselves beyond concealment, and a call on account of the newly strengthened contract agreement. Are all the parties true to their promises? There is no question but several of the most stable and straightforward dealers and jobbers are noticeable for their lukewarmness on the contract question. This cannot be laid to the cause of indifference or disinclination to stand by the agreement but it has been intimated that there is a suspicion of peculiar ways of looking at the agreement by some of the other dealers. In

fact, while no one will assume the responsibility of making specific charges, there are those who express the belief that salesmen are already offering country druggists and dealers in proprietary goods a liberal discount, provided they place their other orders with them. This may be the work of salesmen without the knowledge of their houses, but a strict investigation and some sensational developments are not an impossibility in the near future. Hence the agreement is not looked upon in some quarters as absolutely sacred, although no move toward a break will be made until the matter is thoroughly investigated.

THE FALL TRADE GOOD.

The fall trade is good and the outlook for holiday trade is excellent. Novelties and the goods which are peculiarly intended for winter trade are moving well and country visitors with big orders are becoming the rule rather than the exception. Staples have taken an upward tendency and the Chicago market is firm and healthy.

THE INDIAN SUPPLY BUREAU.

The establishment of the Government Indian Supply Bureau has resulted in great benefit to the local drug market. Large orders are being received from Washington, and the Government purchasing agents seem to be taking a look in this direction for general drug supplies for the West. A few days ago Morrisson, Plummer & Co. received an order for \$2,300 worth of drugs and chemicals to be delivered at the Indian Bureau warehouse here, and several other drug houses have filled large orders.

A MEDICAL STUDENT SUICIDES.

The coroner's jury returned a verdict of death from the effects of poison administered by his own hand while despondent, in the case of J. H. Christensen, the young medical student recently found dead in a vacant lot. H. C. Christensen, who has a drug store at 884 West Madison street, with whom the young man lived, although no relationship existed between them, testified to the exemplary habits and good character of the deceased, and it was shown that hard study and ill health had brought about a state of melancholia.

NO MONEY IN "ALL NIGHT BUSINESS."

Several of the leading downtown druggists who for years have never closed their doors, are considering seriously the question of closing at midnight. The trade after that hour is said to be of an unprofitable character and the early morning patrons are described as bringing in more trouble and annoyance than money. With the exception of a few central points, there is nothing to command business after midnight, and many of the all-nighters will probably follow. Henry Goetz, whose store in the Tacoma building is in the heart of the city, is now closing at midnight.

DRUGGISTS AND THE SALE OF LIQUORS.

The old controversy over the sale of liquor by druggists and restaurant keepers has again come to the surface, the result being a merry war between the Liquor Dealers Protective Association of Chicago and several local druggists and restaurateurs. A few days ago warrants were sworn out by Henry Miller of the association for the arrest of the following named persons for selling liquor without a license:

J. Campbell, No. 413 West Madison street; J. Mueller, Nos. 126 and 128 West Madison street; D. K. McDonald, No. 78 South Halsted street; Gustav Golden, No. 373 West Twelfth street; Daniel Bramlette, No. 250 South Halsted street; D. McDonald,

No. 285 West Madison street; J. Fraylors, No. 200 West Madison street; L. H. Allies, Nos. 114 and 116 Lake street; W. N. Moore, No. 351 North Clark street; R. J. Dorrance, No. 315 North Clark street; John Schuene-mann, No. 803 La Salle street; John Bush, No. 803 La Salle street; J. Sturn, No. 230 North Clark street; John Beers, No. 129 North Clark street; John Eddy, No. 129 North Clark street; L. H. Allen, No. 114 Lake street; W. G. Williams, No. 234½ East Chicago avenue; George W. Bastine, No. 298 North State street.

Nearly all the warrants have been served, the defendants giving bail and more arrests are said to have been prepared. Mr. Miller says he has been engaged for some time in watching this matter and claims to have conclusive evidence of the open violation of the law regulating the sale of liquor in quantities less than a gallon, asserting that he has personally made purchases of all the people named, in quantities below the stipulated restriction.

A CONCERT IN KENT LABORATORY.

A benefit concert was given in the theater of Kent Chemical Laboratory at the University of Chicago on the evening of the 18th inst. by the Tomaso and Imperial Mandolin Orchestra, assisted by Salvator Tomaso, soloist; Miss D. King, accompanist; the Scotch Choral Union, the Ben Franklin Male Quartet and Campbell and McGrath, elocutionists. The concert was given for the benefit of the Fifty-fifth Street Mission, which was founded by the students of the University last year and the Pullman relief fund.

NEWS NOTES.

C. Hallowell, of Claypool, Ind., has been buying a new stock of goods in this city.

M. Considine has bought the branch store of E. L. Caron at 109 Blue Island ave.

A fine new drug store has been opened this month at Bloomington, Ill., by W. R. Beal.

E. W. Lees of Kewanee, Ill., has just returned from a recreative trip through the West.

J. S. Brubaker, of Vinton, Ia., and R. G. Sexton, of La Crosse, Wis., were recent visitors.

S. W. Reed has opened a new store at Elkhart, Ind., the stock being purchased in Chicago.

Asa Foote, the leading druggist of Fort Atkinson, Wis., has been visiting the trade recently.

Robert Case, who is starting a new store at Decatur, Ind., was buying goods in the city last week.

W. N. Caldwell, representing Peter Van Schaack & Sons in Indiana, has been in the city for a few days.

Mr. Mason, of the firm of Mason & Nixon, of Palouse, Wash., passed through en route home from New York.

The drug store of Geo. C. Dunning, at 230 22d street, was recently burglarized, but the loss was small.

Frank Andre, who formerly clerked for F. M. Meyer, on Archer avenue, has bought out E. I. Pope of Moreland.

Morrisson, Plummer & Co. have been fitting up the new store of John Lynch, at Forty-seventh and Vincennes avenue.

Wm. Gail, who for three years has been clerking for Dale & Sempill, has been promoted to the position of night manager.

Al Weber, of the Hyde Park Pharmacy, is prostrated from overwork and nervous

exhaustion. He will take a rest of several weeks.

Manager Lawson is the title now borne by the former night man at the American Pharmacy, corner of Congress and State streets.

M. Brewer, the Monmouth (Ill.) drug man, has just returned from the Mud Baths at Indian Mineral Springs, where he had gone to cure his rheumatism.

W. H. Edelman, the leading druggist of Sheridan, Wyoming, is spending a few days in the city, looking over the markets.

Morrisson, Plummer & Co. recently received a telegraphic order from Washington to supply 3,500 pounds of acid for the Signal Service Bureau in this city.

T. C. Ballard, who handles the sundry department of Morriasson, Plummer & Co., came back last week from his summer vacation and is much recuperated.

A. B. Hunt, manager of the city department of Fuller & Fuller, who has been spending a month's vacation at Old Point Comfort, Va., is again in the harness.

The Listol Pharmaceutical Company has been organized in Chicago with a capital of \$50,000; incorporators: E. M. Kenyon, E. L. Stafford and William H. Rattenburg.

F. J. Winkleman has bought of E. T. Richards the stock and fixtures of the store at 111 West Madison street, and moved them to the corner of La Salle street and Chicago avenue.

The M. Fred. Dattelzweig Company is a new concern, to engage at the corner of Wells and Kinzie streets in the manufacture of a proprietary remedy which Mr. Dattelzweig has just patented.

The Howard Medical College evening school has secured the services of Dr. S. V. Clevenger, who will take the class on mental and nervous diseases, and Dr. W. F. Eckley, who handles the class in anatomy.

W. B. Cory & Co. have purchased the pharmacy in the Medinah Temple of L. C. Welles. The new firm is composed of W. B. Cory, a former clerk for Mr. Welles, and Aaron P. Cory, uncle of W. B. Cory.

Geo. Maxwell who has managed the pharmacy of Ed. Henry in Champaign, for upwards of ten years, is still to be found behind the prescription counter at that store. George is looked upon as a man of great probity of character and a careful pharmacist.

Among the recent incorporations is the Grote-Greenstreet Chemical Company, of Chicago, with a capital stock of \$100,000. The incorporators are Robert A. Mormann, Frank C. Grote, Wm. D. Grote and Chas. J. Greenstreet.

Letters received from Peter Van Schaack contain the announcement that he and his grandson are enjoying a jog through Ireland. Robert Van Schaack and family have returned from the Atlantic seaboard, where they spent the summer.

R. W. Wilson has bought a new stock of Morrison, Plummer & Co., for his store at Marshfield avenue and West Van Buren street, Jersey City. Bennke has also given the same firm a big order for his store at Ontario and North State streets.

Henry Soleman of Tama, Ia., who successfully combines a greater variety of business enterprises than probably any drug merchant in Iowa, is in the city, visiting the trade. He has the record of selling anything from a quinine capsule to a threshing machine.

About a year ago E. Von Hermann sold the drug store at the corner of 31st street and Wentworth avenue, to T. J. V. Carter,

but it recently reverted to the original owner and has now been sold to Bodo Hülendorf, who has been traveling for Humiston, Keeling & Co., and was formerly in the retail drug business.

The organization of the Registered Drug Clerks' Association is being made firm and efforts are being made to bring in all organizations of an affiliated nature in the State. Articles of incorporation were recently filed with the Secretary of State, and the names of Fred Roderick, M. Fred Dattelzweig and W. H. Stuehlick appear among the incorporators.

MISSOURI.

St. Louis, Oct. 18. -For the last few days the citizens of our city have been busily engaged looking after their political interests as the primary elections took place on the 17th and 18th. These elections were especially interesting to the pharmaceutical element because two of the leading druggists of our city were candidates for nomination. On the Republican ticket was to be found the name of Solomon Boehm, candidate for Justice of the Peace, this election took place on the 17th: while prominent on the Democratic side of the house was the name of that ever progressing young druggist, Prof. Francis Hemm, candidate to the city Democratic Convention. The Democrats of the 11th Ward had two tickets in field, the regular Democratic ticket and another of name too odorous for mention. Prof. Hemm was on the ticket of odorous suggestion. All the parties on this ticket were pledged to do all in their power towards removing the "Stink-Factory," St. Louis Sanitary works, from within the city limits. Mr Boehm was nominated on the Republican ticket, but the result of to-day's election has not yet been ascertained.

DR. CURTMAN'S LECTURE.

On the evening of Oct. 16, the Alumni Association of the St. Louis College of Pharmacy opened their series of scientific meetings with a lecture by Dr. Chas. O. Curtman, a debate and a banquet. Though all present came with great anticipations as to the lecture, it can be truly said the lecture far exceeded the expectations of the most fanciful. His subject was "Electric Experiment." The doctor had apparatus with which he explained, in his usual simple way, the manner in which the electric current is applied, and everyone present went home with a general understanding of our modern electrical machinery from the front door bell to the great street railway motors. He also explained the general principles of our ornamental electric displays and gave some exhibitions which were well received. Following this lecture came a banquet, under the auspices of the ladies. It would be hard to speak in too high terms of this part of the programme. The debate followed the banquet. The subject was: "Does it pay to study pharmacy?" G. H. Chas. Klie and Theo. A. Klipstein maintained that pharmacy was a splendid paying business, while O. E. Smith and S. P. Randall both claimed that they had been in the drug business for a number of years and came very near losing the little money they had managed to save up in other pursuits and they are now looking around for some other vocation; further, they knew of many other parties in a similar condition. As no judges had been appointed, a verdict was not rendered, but your correspondent made a thorough canvass of the audience and found opinions about equally divided.

Prof. Otto. A. Wall, of the college, responded to the toast: "The ladies." This was entirely extemporaneous, and though very short it was characteristic of the able speaker who delivered it.

On a motion by Prof. Hemm, a rising vote of thanks was tendered Dr. Curtman for his instructive and interesting lecture.

DRUG CLERKS' SOCIETY.

On the 11th of October the society met to compare notes and see what they had accomplished in the advancement of their profession, and after due consideration they all agreed that they had accomplished all that could be expected. Ambrose Mueller, Henry Fritschler and Mr. Kyme are three old members who seldom get around to the meetings, but were there for the general round up. Six new members were elected, and as many more applications for membership were presented. Drug clerks looking for positions would do well to call on or address Otto Mack, care Myer Bros. Drug Co., as Mr. Mack is at the head of the Bureau of Information. A committee of three was appointed to be known as the reception committee. Their duty will be to welcome the new members and make every one feel at home at the meetings. The next regular meeting will be held Nov. 9, when final preparations for the ball will be made. One of the leading retail druggists of this city will be at the next meeting to give the boys a little wholesome advice and a few words of encouragement. Albert Koch will read the Missouri Pharmacy Law at that meeting, and suggest changes,

A TALK FROM THE MAYOR.

The College of Pharmacy opened on the 8th inst. and the boys are now about settled down to hard work. On the evening of the 8th the students, faculty and board of trustees met at the college for general announcements, etc. Mayor C. P. Walbridge, who is president of the college, made a short speech in which he gave the boys some good sound advice which is still ringing in their ears. The Mayor is a self-made man, and as such his advice was cherished highly by every student present. It was the best starter that could have been given the boys. It roused their ambition and is having its effect on the every day work of the students. The junior class of the college is larger than last year but the senior class is much smaller than it has been for a number of years. Most of the members of this class are residents of the city.

A STRICT BOARD OF PHARMACY.

The boys are beginning to think these are "hard times" when only three out of twenty-seven pass the examination of the State board of pharmacy, as was the case at the examination held a few days ago. A good share of the failures were due to a lack of knowledge of crude drugs. This is always one of the principal subjects in the examinations and it is the weak point of most of the boys.

THE CONDITION OF TRADE.

All of the wholesale houses report trade improving rapidly. There is a very marked increase in the city business.

GLEANING THE NEWS.

J. M. Medler has bought the A. G. Medler Pharmacy, located at 25th and Brecken streets.

Theodore Meyer of the Meyer Bros. Drug Co. attended the Wholesale Druggists Convention in New York.

Chas. Mengler, Ph. G. with F. B. Vogt, 22nd and Dodds streets, is just getting around from a severe sick spell.

Wm. Billerth of the Billerth Bros. Pharmacy was married Oct. 17th. His many friends wish them much happiness.

Mr. Nathan Bears, manager of the Bears Drug and Paint Co., of Salt Lake City, has been spending a few days in our city.

Dr. J. C. Falk, secretary of the College of Pharmacy, made a hasty trip to his home in the center of this State the fore part of the week.

R. S. Vitt, head clerk for Prof. Hemm, has been at his home, Washington, Mo., for a few days, attending the wedding of his sister.

Frank Garthoffner, head clerk for Bohrmann & Mynders, 11th and Hickory streets, starts on a hunting expedition down in Arkansas in a few days.

Henry Garthoffner, who has been clerking for Wm. Mittelbach for a number of years is now located at the Henderson Pharmacy, 34th and Olive streets.

Mr. Meyer of the Meyer Bros. Drug Co., has been down the river on a fishing expedition but he says he thinks the fish have all been caught out of the Mississippi.

IOWA NEWS NOTES.

Fred Parvin is clerking for A. H. Miles, Des Moines.

Paul Williams is not clerking for Dr. Belby, Des Moines.

R. C. Johnson & Co. have retired from the drug business at Des Moines.

Z. T. Reel & Co., Des Moines, have moved their stock of drugs to Adel, Iowa.

Jas. Richmond, Dallas Center, visited Des Moines recently. He reports business as quiet.

N. E. Stowe, of Linn Grove, Iowa, has sold out his store to his former partner, a Mr. Roberts.

W. J. Stewart, pharmacist, Grimes, has just returned from an extended trip through Colorado.

Frank Sheldon will open a drug store at 10th and Centre streets, Des Moines, in room lately vacated by Odimer & Co.

The town of Adel, Iowa, was visited by a disastrous fire on the morning of Oct. 8th. No pharmacists suffered thereby, however.

Geo. W. Core, a prominent pharmacist of Rolf, Iowa, is spending his summer vacation with a hunting party in the wilds of Manitoba, hunting bear and large game.

Prof. Floy Davis, for years Professor of Chemistry at Drake University, Des Moines, but who last year resigned and went to Arizona, is again a resident of Des Moines.

B. G. Odeorne & Company have removed into elegant new quarters corner 9th and Centre streets, Des Moines. They have added new furniture throughout and now have a beautiful store.

The proceedings of the Iowa Pharmaceutical Association are now in the hands of the printer. Secretary Spaulding has found it an uphill job, as the stenographer mislaid his notes of the proceedings.

A. W. Litchfield, of Pleasantville, had his store destroyed by fire last month. He has ordered a complete new stock and is ready for business again. We did not learn the amount of loss sustained nor the insurance.

The stock of drugs owned by Dr. A. M.

Bilby in the Aborn House, Des Moines, was taken possession of by Wm. Priebe under a mortgage Friday, Oct. 5. It is understood that Priebe will carry on the business as formerly.

Smith & Company of Morathen, Iowa, have brought out Miss Lucia Sanders' store and are consolidating the two stocks. Miss Lucia has concluded to desert the mortar and pestle and take upon herself matrimony. May her new venture be a prosperous and happy one.

The department of pharmacy of Highland Park College, Des Moines, reports increased attendance over the opening term last year. The college has just completed a new laboratory for the spectroscope and polariscope. Prof. Grimes, who last year was Professor of Pharmacy is this year studying medicine and a new man has charge of pharmacy classes; your correspondent has not heard his name. Prof. Macy is devoting his whole time to chemistry this year, and Dr. Scott has charge of classes in Materia Medica and Therapeutics. Everything points to a prosperous year for this school.

CALIFORNIA.

SAN FRANCISCO, Oct. 17.—The committee on Preliminary Examinations of the California College of Pharmacy have issued an interesting document relating to the requirements for entrance examinations. The report states that the Committee, which is composed of Profs. W. M. Searby and J. J. B. Argenti find a wide diversity in the requirements for entrance in the various colleges of pharmacy, a few admitting without any credentials or examination, the majority being satisfied with a certificate of graduation from a grammar school, and a few demanding a higher grade of scholarship. In general, the University Schools of Pharmacy, such as Ann Arbor, Wisconsin, Washington and the North-Western University (Illinois College of Pharmacy) have set their entrance requirements higher than the others.

THE THREE YEARS COURSE.

"While the matter of an extension of the course of instruction so as to cover three instead of two years was not strictly within the province of the committee, attention was called to the fact that such an idea is gaining currency, and that rumors are in the air that this step will soon be taken. We consider such a change would be premature," says the report "so long as the requirements for admission remain as they are. We are filled with surprise at one of the largest Eastern colleges announcing that the three-term course will shortly be inaugurated, while they have never yet announced any positive requirements in regard to admission. Under such conditions, it seems to us that to extend the course of instruction through a third year is like raising another story upon a house that has been built upon a very frail foundation."

The committee makes the following recommendations:

1. That the paragraph at the head of page 9 of the Prospectus for 1894 be stricken out, and the following substituted for it:

REQUIREMENTS FOR ADMISSION.

1. Applicants for admission must be at least eighteen years of age. (While it is advisable that students shall have one or two year practical training in a drug

store before entering the college, this is not compulsory).

2. Applicants will be accepted who bring the following credentials:

a. Certificates of graduation from High Schools of this State.

b. Diplomas of graduation from schools or academies accredited by the State University. (See Register of the University of Cal., 1894, page 39.)

c. Certificates of high standing in other institutions of the collegiate grade.

d. Diplomas from Normal schools of this State.

e. First grade teachers' certificates of this State.

f. Certificates of having completed satisfactorily the first year's course in High Schools of this State.

3. Applicants who do not present any of the foregoing credentials will be examined in the following branches:

a. English.—They will be required to show their ability in spelling, punctuating, use of capitals, grammatical construction and correctness of expression. (The handwriting will be estimated and form a part of this examination.)

b. Geography.—American and General; Free-hand drawing.

c. Mathematics.—a. Arithmetic; fundamental rules; fractions, common and decimal; denominate numbers; percentage; proportion.

d. Algebra; fundamental rules; fractions; equations of the first degree, consisting of two or more unknown quantities. (In the session of 1895 applicants may be expected from this examination, but in the year 1896 it will be enforced.)

e. Latin.—Rudiments; declensions of nouns, pronouns, adjectives; conjugations of verbs; translation of simple sentences from Latin to English and English to Latin.

Applicants who fail to obtain the required percentage in free-hand drawing and Latin may be entered conditionally, but will be required to pass the examination satisfactorily in the studies at the close of the Junior Lecture Course.

The committee further recommend that the entrance examination be conducted by a committee of three chosen from the Faculty and Board of Trustees, who shall employ a person not connected with the College, who is or has been a teacher by profession, such person to be paid for his services by the College. At the close of these examinations this committee shall report to the Dean the names of such applicants as have passed their examination satisfactorily. The Dean shall thereupon matriculate them as regular students.

It is also recommended that all applicants who are required to pass an examination before entering be charged a fee of five dollars, which is not to be returned in case of failure. But all who pass the examination satisfactorily shall be entitled to matriculate without further payment.

The committee's report was adopted by Board of Trustees, and the above recommendations constitute the requirements for admission for the session of 1895.

NEBRASKA NOTES.

W. L. Hellman has gone back to the drug business in Tecumseh after a two-months' vacation.

P. W. Evans, of Orleans is contemplating moving his drug stock to Pawnee City, Neb., in the near future.

McCall & Burch have opened a new store at 1229 Thirteenth street, and J. E. Riggs one at the corner of Thirteenth and O streets, Lincoln Neb.

J. G. McBride and Miss Berta Jennings were married October 16th at the residence of the bride's parents in Table Rock. They will begin housekeeping at once in Pawnee City. The following druggists attended the wedding: Mr. and Mrs. S. G. Wright, Mr. and Mrs. Dr. Wilson, and Mr. and Mrs. Dr. Broyles, of Table Rock; Mr. and Mrs. A. G. Wanner, of Falls City; Dr. A. B. Anderson and wife, and Mr. and Mrs. J. F. Griffith, of Pawnee City; and F. L. Madelin, of the C. D. Smith Drug Company.

Washington Pharmacists.

The fifth annual meeting of the Washington State Pharmaceutical Association was opened in Tacoma, September 17, with President A. W. Doland, of Spokane, in the chair, and about fifty members in attendance.

The chief business of the morning session consisted of the reading of the president's address. This proved quite an able document. As subjects for discussion by the Association, President Doland named the following: First, The Cut Store; second, Prepared prescriptions; third, new preparations; fourth, putting up our own preparations. "My remarks," he said, "may seem to be too much on the practical side, but we are all day by day brought face to face with the conditions that prevail. The educated druggist is entitled to more than a mere profit on the cost of his goods. He is entitled to something for the study, something for the years and money spent in acquiring the skill to become a pharmacist that the members of this association possess. You are just as much entitled to recompense for your knowledge as the lawyer or physician. The 'cut store' does not as yet prevail much in our State and so far as, I believe, confined to this section; but it is liable to break out at any time. How to handle the matter is a subject discussed at all gatherings of druggists, and it bothers wiser heads than ours.

THE GROWTH OF SPECIALTIES.

"The growth of the new pharmaceutical preparations—so called—in every community there is but certain demand; your shelves are full; every call of the physician or patient is met. A smooth-talking agent comes along with Dr. Jones' Hypophosphites or Dr. Smith's iodine and interests the doctor. You are forced to buy; your stock on hand is unsaleable; you make 25 to 40 per cent. on the new preparation and lose 100 per cent. on the stock formerly purchased. I believe the druggist should put up more of his own preparations and push them. By this I do not refer to the so-called non-secret goods, but medicines put up in your own store. I believe in many cases you understate your own standing in the community; your patrons have more faith in the druggist and his knowledge than you are aware of; your own preparations, made in your own store, will sell if put up neatly, displayed to advantage and the sale of them pushed."

The date of the annual meeting was changed to the first Monday, Tuesday and Wednesday in September, and the place of the next meeting fixed for Seattle.

The annual election of officers resulted as follows: President, Robert Marr, of Olympia; first vice-president, Alpheus Davidson, of Tacoma; second vice-president, David Wall, of Vancouver; third vice-president, W. H. Chapman, of North Yakima; secretary, Walter St. John, of Tacoma; treasurer, U. G. Wynkoop, of Tacoma.

Vermont Pharmacists.

A special meeting of the Vermont State Pharmaceutical Association will be held at Montpelier, about November 1st, and President Higgins has issued a call in which it is stated that the officers want every reputable apothecary in the State enrolled as a member of the organization. He says:

"We have made a splendid beginning, and have seventy-six apothecaries pledged to the good cause; so let us make a little extra effort and get every

one in the State. Our sister States have their eyes upon us; let us not disappoint them, but show them that Vermont can do as well pharmaceutically as they.

CONNECTICUT.

NEW HAVEN, October 20.—After a personal interview with a large number of representative druggists of the Nutmeg State, your correspondent can state that there appears to be an encouraged feeling at the promising outlook of the drug business.

COLLECTIONS BETTER.

They all report that collections are better than they were and that the cash business is larger than it has been during the past few months.

They all say that patented articles have been affected to a considerable extent by the depression and especially those that have not been advertised as much as they were in the "good times."

This opinion is general among druggists and goes to show how foolish manufacturers of these patent articles are to cut off their advertising during dull times; it is as one expressed it, "Penny wise and pound foolish" idea.

HARTFORD CLERKS ORGANIZED.

The first annual meeting of the Hartford Drug Clerks' Association was held October 11. The election of officers for the ensuing year resulted as follows: President, L. F. Hawley; vice-president, L. H. Tracy; recording secretary, J. F. Mack; financial secretary, A. H. Rungee; corresponding secretary, G. Folett; treasurer, A. E. Lathrop.

A committee to draw or form new by-laws to be presented at the next monthly meeting (which is to be held November 8 at 8 p. m., instead of 10:30 p. m., as formerly) were: R. H. Robb, E. C. Noonan and A. H. Rungee. The association is in good financial standing and desires every drug clerk in the city to join.

ITEMS OF INTEREST.

W. J. Duncan & Co. recently opened a new store in Waterbury.

H. B. Platt has opened the North End Pharmacy in Waterbury.

Thomas Casey & Co. have started on Baldwin street, Waterbury.

E. L. Pierce of South Main street, Waterbury, has moved out of town.

Edward F. Nolan of East Main street, Waterbury, has closed his store.

Allen Meeber & Co., have taken the store lately occupied by Goodell in Bridgeport.

G. Malone, 163 Harral avenue, Bridgeport, made an assignment a short time ago.

F. B. Brill, formerly of Grand avenue, New Haven, has opened a pretty store on Asylum street in the same city.

J. E. Cogan, of Hamilton's drug store, Bridgeport, has entered Jefferson College at Philadelphia to study medicine.

Percy Littlejohn, formerly clerk in Hewitt's on Chapel street, New Haven, has just entered Yale Medical School.

H. D. Cannon, son of Dr. F. M. Cannon, of the firm of Cannon & Webster, in Waterbury, has entered the New York College of Pharmacy.

James Maguire, the popular clerk in Eagny's pharmacy on Grand avenue, New Haven, has just begun his second year in Yale Medical School.

James Nelson closed up his place on the East End in Bridgeport, and has taken

charge of L. W. Booth's store on Wall street, in the same city.

A. G. Kaesman, formerly with Warner's pharmacy in Bridgeport, went back to New York a short time ago to resume his studies in the New York College of Pharmacy.

There have been a number of changes in the drug business in the Brass City lately. Edward Bossidy sold out to Geo. T. Gettis. Mr. Gettis intends to keep open all night.

J. Healey, formerly with Keegan on Grand avenue in the City of Elms, has started a drug store where Burr used to be on the corner of Saltonstall avenue and Lloyd street.

It is quietly rumored that a son of a well-known druggist on the lower part of Grand avenue, New Haven, is soon to be married to an estimable and talented young lady of the same city.

"Joe" (familiarily known) Savalaye, formerly with Dimmock on Congress avenue, New Haven, has just begun his second year in the New York College of Pharmacy.

A pretty wedding took place in Brooklyn, N. Y., October 10, the parties being J. A. Levery, of the Bull's Head Pharmacy in Bridgeport, and Miss Marie Adele Murphy, of the City of Churches.

Mr. Moeller, who recently opened a bright looking store on Grand avenue, New Haven, expects to put in his establishment a tile floor and mirror ceiling about January 1. Paul B. Krinstein is the manager of this store.

P. Herrity will move from his present quarters in the Reilly block on Congress avenue, to the new building to be known as the Fishell block, on the junction of Liberty and Washington streets, just as soon as it is completed, which will probably be by December 1.

J. A. Levery, who has become proprietor of the Bull's Head pharmacy, in Bridgeport, Conn., since he graduated with the Class of '89, N. Y. C. P., was married recently in Brooklyn, to Miss Marie Adele Murphy, of that city. The honeymoon was spent in a trip to Niagara Falls and other points of interest.

An Interview with John Wyeth.

In reply to the questions of an interviewer, John Wyeth, of the firm of John Wyeth & Brother, Philadelphia, thus discusses the business situation:

THE BUSINESS SITUATION.

"Stocks are at their lowest point; the uncertainty has curbed production. I cannot see how we can be further depressed. Speculative things sent to one side will rather help our business sales. Yes, we shall come up. We must."

"Are you starting up?"

"Oh, yes; our factories are running three nights in the week, as well as every week day. For several years I have quit my business house at 1 o'clock every day, as the reward of 40 years. Since the Senate bill has been endorsed I have again remained all day at my office. The retail drug trade in America is unique and that is my market. The druggist employs small capital, reads his drug journals and is critical as to the quality of his wares. I never could feel as they do in England that my business did not press upon me; some mistake of a clerk might poison a multitude of people. This added and accepted responsibility of the American business man is one of the evidences of his mercantile superiority."

THE AMERICAN MANUFACTURER.

"That you believe to be a general truth?"

* * *

"The American is pitched in a higher key for business than the European. His ambition is not to retire and disdain his business, but to make it his fame. He knows more, reads more, observes more, travels more, conceives his market with more sympathy, understands the people from a higher level of the people and caters to a higher general race than any nation possesses. In mechanisms to aid production all our manufacturers are trained. Between the people and their native merchant manufacturers we have a combination irrepressible. If politics make difficulties for such men they are like the engineering difficulties only of generals who will not be baffled. Therefore I say that he who expects to circumvent the American trade will be defeated."

"You know of cases where Americans have beaten the older nations on their own ground?"

"The largest house in the preparation of proprietary medicines in Europe was started by one of my commercial travelers, an American boy. He was with me for years, saved all his money, received at the last \$3,500 a year and his traveling expenses. He wanted an interest with me, which I could not give. He said he had just inherited a little money and must start for himself as a principal. I said to him: 'Go to London. It is the great distributing point. I will give you credit for \$20,000 in my stock, which you can make worth \$40,000.' For some years I had an interest with him. He expanded, manufactured for himself, and is a millionaire in London. His partner, Wellcome, started an American woman recently on a survey of Africa."

THE POSITION OF QUININE.

"The plantations of quinine trees in India have been very successful, and have even so in the Dutch colonies like Java. A specific has been taken from the custody of American savages and made to grow in many lands. The high tariff on quinine was maintained here by two or three firms which did not support in it 200 employees. The most ingenious arguments were used to cover their cupidity. S. L. M. Barlow, of New York, employed the pen of Parsee Moore to express this imposition. Yet I could have stopped the matter myself for \$20,000. I had a small quinine mill which I had purchased. I thought the agitation was right."

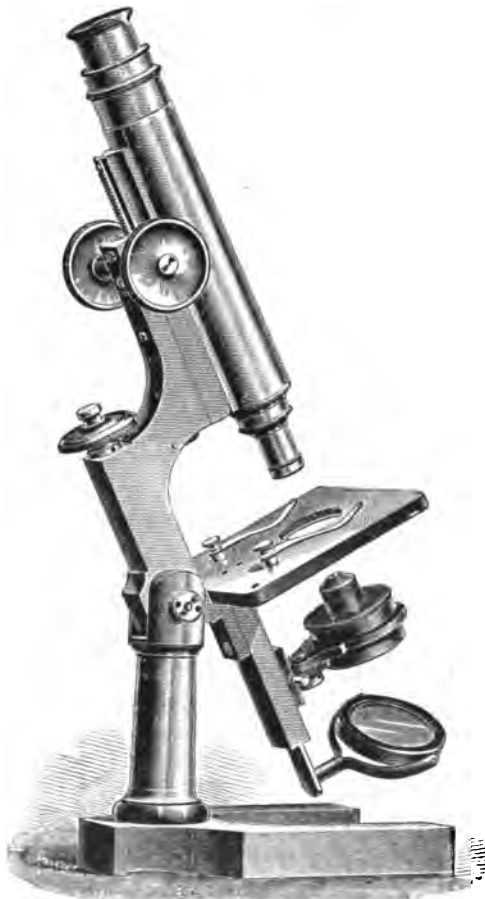
Microscopic Beauties in New Sponges.

Among the most beautiful new microscope slides we have seen recently is a slide of foraminifera, which, under an amplifying power of 50 to 100 diameters, presents a truly enchanting spectacle. After examining them for a few moments the first and most natural question is, "Where in the world did you find them?" The questioner expects to be told that they are scarce and difficult to obtain, and is immensely astonished when informed that they came from among the sand and dust of the sponge-basket in the old Laclede Pharmacy. And yet such is the fact, and they may be found in almost every new sponge. Beat out the first new sponge that you come across, and then put the "sand" under the microscope and you will be amply repaid for your trouble. —*National Druggist*.

Zentmayer's American-Continental Stand.

This stand has been designed to meet the wants of those workers who prefer the compact Continental model, and yet are conscious of its inherent defects. It is substantially a combination of the upper half of Zentmayer's celebrated American Stands, with the lower half of the best Continental Stands, and is adapted to have added all the usual optical accessories of either class of microscopes. As offered, it answers fully every want of the class-room or laboratory at very moderate cost.

The stand is constructed entirely of brass, handsomely finished and polished. The base is of horse-shoe form, filled with lead for extra weight, and gives perfect steadiness in every position. A stout pillar firmly supports the arm of the instrument on a trunnion-joint, which allows all inclinations from the perpendicular to the horizontal position. The coarse and fine adjustments are of the same style and construction as the famous Centennial stand. The arm carrying the body



is provided with two slides, the upper and longer one bearing the tube with rack and pinion movement, and sliding in the lower one, which is controlled by a lever of the first order, operated by a milled-headed micrometer screw in convenient position at the back of the instrument. At the bottom of the lower slide there is a shoulder against which the lever acts, and a spring above presses down against this shoulder, insuring its continuous contact with the lever during adjustments. All the mechanism is concealed within the arm, which is so hollowed as to secure both lightness and greater rigidity. This fine adjustment is absolutely free from lateral motion, and exceedingly sen-

sitive. Its construction prevents wear, and is so positive that a revolving nose-piece and attached objectives can be easily carried without injury. It also acts as a safety appliance in case an objective is accidentally racked down against an object, for the spring yields quickly to upward pressure. The body-tube is five and one-half inches long, with draw-tube extending full ten inches, thus giving both English and Continental standards, and accommodating objectives corrected for either length. The spacious stage is made of aluminum, which is incorrodible; the dimensions (three and five-eighths inches square) are commodious even for culture slides or serial sections; the surface is plane, with recessed opening to receive a glass plate, light modifier, or disk diaphragm, if wanted.

A more complete description will be forwarded on application to J. Zentmayer, 209 S. 11th St., Philadelphia, Pa.

Of Benefit to Physicians.

The new tablets of Antikamnia are meeting with considerable favor at the hands of physicians, as the following testimonial attests:

WASHINGTON, D. C., Sept. 11, 1894.
TO THE ANTIKAMNIA CHEMICAL CO., ST. LOUIS, MO.:
Gentlemen—I desire to thank you for samples of the drug, often but poorly imitated, made by your firm and known as "Antikamnia."

The adoption of the monogram on the new tablets and the recall of all the old stock from the market, will prove of benefit to you and the many physicians who may hereafter desire to afford relief by its use.

Yours respectfully,

C. W. POSTLEY.

Notes on Prices.

New Price Lists.

C. G. Bacon & Co., wholesale druggists and manufacturing chemists, 20 College Place New York city are sending out a neat catalogue of drugs, druggists' sundries and specialties for the general store trade. The catalogue appears to be addressed chiefly to the general store trade and the articles most generally used in this department of business are fully described.

Typographically, the new catalogue is an improvement on many of the publications sent out to the trade and C. G. Bacon & Co., have evidently spared no expense to make it attractive and useful. Copies can be had on request to C. G. Bacon & Co., 20 College Place, New York.

Billings, Clapp & Co., manufacturing chemists, 165 and 167 High Street, Boston, with a branch office at 35 Platt Street, New York, issue a monthly price list of chemicals, alkaloids, alkaloidal salts and pharmaceutical preparations. The fluctuations in market prices are fully set forth and declines are noted in the following lines, viz.: Acids: glacial acetic, citric, hydriodic, and hydrobromic, ammonium valerianate, cadmium bromide, cadmium iodide, caffeine salts, cerium oxalate, codeine salts, iron citrate, iron pyrophosphate, sodium citrate. Advances are noted in tartaric acid, cocaine and its salts.

The Robinson-Pettet Co. (incorporated), successors to R. A. Robinson & Co., wholesale druggists, Louisville, Ky., issue a complete catalogue and price list of drugs, chemicals, pharmaceutical spe-

cialties, paints, oils, glass, varnishes, etc. Accompanying the list is a neat catalogue of sundries, containing full mention of such books as are handled by country druggists, school supplies, perfumes; cigars and tobaccos also figure largely in the list.

The Bill Inoperative for Lack of an Appropriation.

According to an Associated Press dispatch, the treasury officials, after having thoroughly discussed the alcohol paragraph of the new tariff bill, have about reached the conclusion that they have no means at hand to enforce it, and that, therefore, the rebate clause must remain inoperative until Congress, at its next session, either provides the appropriation necessary to carry the law into effect or repeals it. This particular paragraph has caused the department a vast amount of trouble, and the correspondence growing out of the question has been enormous. Although the executive branch of the government has nothing to do with what may have been the intent of Congress, it is, however, known that the intent of the legislators and of Mr. Hoar, who introduced the amendment, was to grant the rebate provided for in the case of alcohol used only in the arts and sciences. No one at that time supposed that patent medicines and proprietary articles would be included under this head. So great would be the drain upon the revenue if this class of goods were permitted to draw the rebate that the treasury officials assert they are justified in taking refuge behind the ruling thus made. The laws could only be enforced by the expenditure of a large amount of money, which is not now available.

Package Prices.

William H. Raser, drug broker and commission merchant, 132 Platt street, New York, issues his "Package Prices Current," under date of October 17. He reports a moderate trade doing in jobbing parcels, but few transactions on a large scale:

QUININE remains steady at previously quoted figures, viz.: 24¼ @ 24¼c for jobbing lots of foreign in bulk as to brand and quantity. A round lot on a strictly cash basis could probably be secured at 24c net.

OPIUM.—There is a trifle easier feeling among holders owing to absence of demand and to cable advices of copious rains in the growing districts which is, if anything, at this juncture a "good" indication for the next crop. Most holders are firm at \$2.12½ for cases, and \$2.15 for broken lots, but it is thought with orders in hand the figures could be shaded about 2½c. We invite your offers at \$2.10 for cases, feeling pretty sure that we can do this if not less.

PURE POWDERED OPIUM, \$2.65 @ 2.70 asked for 50 or 100-lb lots, we think \$2.60 would buy to-day.

BALSAM TOLU is hardening in value, 26 @ 28c is now asked.

BALSAM PERU unchanged.

BALSAM COPAIBA, pure cleaned at 33 @ 34c.

BALSAM FIR, Canada, is lower and quoted at \$3.00 @ 3.25; the inside figures will secure barrel lots.

BALSAM, Oregon, at 65 @ 75c for barrels and less.

CAMPHOR declined to-day to 39c in barrels and 40c in cases. Lower prices for Japan camphor will probably follow.

CAFFEINE has further advanced and \$3.50 and upwards is now asked; the article is scarce here and in Europe.

AMERICAN SAFFRON—The price has been further pushed up by the few holders to 40c in bales and 41c in barrels.

MEXICAN SARSAPARILLA declined to 6¼ @ 7c as to quantity. No change in Honduras prime, sales at 27 @ 28c.

IPECAC ROOT, owing to a sharp advance in foreign markets is now held here at \$1.15 @ 1.25 as to quality, etc.,

JALAP unchanged.

GINGERS, African and Race, are again higher.

ALLSPICE and BLACK PEPPER are easier.

CORIANDER SEED, a trifle easier and tending lower.

CARAWAY SEED, slightly higher.

CANARY, Smyrna, easier at 3 @ 3¼c, and Sicily seed at 3¼ @ 3½c.

MUSTARD SEED is lower.

OILS.

ANISE, London cables of yesterday were 10s., 6d., (over \$2.50), but we are still able to buy here to-day at \$2.25, though from \$2.35 @ 2.50 is now being asked.

CASSIA is also excited here and abroad and up to \$1.50 is asked, but we can still buy at \$1.20 or under (on Monday a sale was made at \$1.10).

PEPPERMINT dull and values are unchanged.

CLOVE, CUBEB, PENNYROYAL, SASSAFRAS and WINTERGREEN as previously quoted, see figures on inside pages.

OLIVE OIL, Malaga, Opt. and green, have advanced and are tending higher.

COD LIVER OIL unchanged at \$25.00 @ 27.00 for Norwegian, as to quality.

CHLORATE POTASH further declined and is now offered at 10¼ @ 10½c for crystals, and 10½ @ 10¾c for powdered.

ENGLISH BICARBONATE SODA is lower and American likely to follow downward.

CONTI SOAP as yet unchanged, but firmer owing to advices of higher prices for olive oil.

QUICKSILVER 51 @ 52c is now generally asked, but up to this time we have continued to place our orders at 50½c and invite further orders at this figure.

Wholesale Druggists Prices.

The changes noted during the past fortnight in the prices at which retailers purchase goods in ordinary lots are mainly toward a lower range of values, although some advances have taken place as will be perceived by an inspection of the following paragraphs:

ALCOHOL is now sold on a net basis and values are quoted \$2.42 @ 2.60 for grain, and \$2.63 @ 2.80 for cologne spirit.

BARKS.—Cassia in mats has declined and we now quote the range at 7½ @ 10c.—Saigon has also receded in value and supplies can be purchased at 80 @ 85c.

CAMPHOR owing to freer supplies has declined 8c. Gum in barrels or less is quoted 42 @ 47c. Monobromated camphor which sold formerly at 22 @ 25c is now quoted 18 @ 22c.

CHALK PRECIPITATED has declined from 9 @ 12c. to 8 @ 10c.

ICHTHYOL has advanced materially in the interval, \$6.50 @ 6.75 being now asked for what sold formerly at \$5.50 @ 6.50.

NUTMEGS are lower and the price is now 55 @ 60c.

OIL ANISE continues to reflect a rising market, the restrictions to importations consequent on the Chinese-Japanese imbroglio, tending to heighten values. The quotation is \$3.50 @ 2.75.

OIL CASSIA is similarly influenced and quotations are firm at \$1.50 @ 1.75.

OIL COTTONSEED is easier and supplies are offering at 55 @ 60c.

OIL CUBEB is in poor request, and can now be had at \$1.50 @ 2.75.

ointment, MERCURIAL, ½ mercury is easier in sympathy with the metal. The quotation is 40 @ 45c.

OIL ORANGE, sweet, is weak and a decline to \$1.50 @ 1.65 is to be observed.

RUM, Bay, is lower in consequence of reduced import duties and supplies are obtainable at \$2 @ 2.25.

ST. IGNATIUS BEANS has advanced and 75 @ 85c. is now asked.

OPIUM is higher owing to firmer prices abroad. The quotations are now \$2.25 @ 2.40 and \$8 @ 8.25.

Review of the Wholesale Market.

NEW YORK, Oct. 24, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

The volume of business transacted in the different departments of drugs, dyestuffs and chemicals during the past fortnight has not reached the proportions anticipated at the time of our last report. There is still a noticeable lack of speculation and orders in most instances are confined to lots calculated to cover immediate necessities only. The market may be said to retain the same general features that have characterized it for some time past. No interest whatever seems to be extended in the direction of quantity lots and as noted above the demand is mainly of a jobbing character. Regarding prices we have no changes of consequence to report. Opium is maintained at the slight advance noted in our last, but trade in that article is momentarily at a standstill and it is not thought likely that prices will go higher for some time to come. Alcohol has declined and Japanese Camphor is lower. Below we present a tabular statement of the more important advances and declines in the several departments:

ADVANCED.

Tinnivelly senna.
Ipecac.
Balsam Peru.
Anise oil.
Cassia oil.
Gum Arabic.
English Calomel.
Caffeine.
Pilocarpine.
Asafetida.

DECLINED.

Camphor.
Bicarbonate of soda.
Insect flowers.
Orange oil.
Celery seed.
Coriander seed.
Mustard seed.
Pink root.
Balsam fir.
Senega.
Cubeb oil.

ALCOHOL continues unsettled as a result of the competition among distillers. Trust quotations are now \$2.35 @ 2.40 though independent producers are filling orders upon the basis of \$2.38 @ 2.44.

BALSAM FIR, Canada, has declined materially in the interval and is now offered at \$2.87½ @ 3.10 as to quantity. The offerings are, however, not made with any marked freedom at this range as an early appreciation would look for.

BALSAM PERU is in less abundant supply and the stock of goods in first hands is about exhausted. Jobbers are now quoting \$1.60 @ 1.65.

BARKS.—Cotton root bark has been active during the past few days and among other transactions we are reported a sale of 1,000 pounds at 10c. Cascara sagrada continues in moderate demand with the current sales at 4½ @ 6c.

BALSAM COPAIBA has been in moderate jobbing request during the interval and numerous sales are reported within the range of 8½¢ @ 35c; for the limited available supply of Maracaibo and Angostura in the hands of importers 84 @ 85c. is asked, but as these prices exceeds the views of the buyers little business results.

BALSAM TOLU is offered in instances at 26c, though an advance upon this price is required by some holders.

CACAO BUTTER is in moderately active request with numerous large sales reported at 82 @ 82½¢.

CANTHARIDES are in better demand with sales reported of Chinese at 26 @ 27c and prime Russian at 68c; inferior grades of the latter are offered down to 62½¢.

COD LIVER OIL, Norwegian, is developing a firmer tendency as a result of reports from primary sources advising a rising market. Holders here are firmer in their views quoting \$28 @ 30 as to quality and sales are reported at this range.

CAFFEINE has advanced in the interval and the small available supply is closely concentrated and held at \$8.85.

CUTTLE BONE, Trieste, is well sustained at the advance to 8½¢ @ 8¾¢ with sales at this range. Reports from primary sources advising a short supply are responsible for the advancing prices and it is thought likely that prices will go higher.

CUBEB BERRIES continue dull and easy at nominally 14 @ 16c. for XX and 11 @ 12c. for the lower grades.

COLOCYNTH continues in limited supply and the price is maintained at 42½¢ @ 48c as to quality.

KOLA NUTS are in more liberal request and we hear of numerous sales at the range of 26 @ 27c.

LYCOPodium continues easy at 47 @ 58c. according to brand and quantity.

LEAVES.—Belladonna and hyoscyamus are reported advancing at primary sources owing to a rumor of failure of crops, and prices are strengthening here in consequence. For the former 12 @ 18c is asked, and for the latter 11 @ 12c.

MENTHOL is offering more freely and at slightly easier prices, down to \$5.25 being now quoted as acceptable.

MORPHINE of foreign manufacture has been advanced in one instance 10c per ounce, with \$1.65 now the lowest open quotation.

OPIUM has not maintained the advance noted in our last, and the trade, so far as regards the sale of cases, is momentarily at a standstill. The lowest open quotation named is \$3.10, but only a limited business is being transacted, most buyers seeming to depend upon a possible future decline in value, though holders on the other hand show no disposition to urge sales by making concession from the quoted range. Late advices from Smyrna report more favorable prospects for the fall showings, and the market is slightly easier in consequence. The quotations for jobbing quantities remain \$2.12½; powdered is steady and in moderate demand at \$2.65 @ 2.70.

SAFFRON, American, continues in demand, and we are reported a sale of a bale at 40c.

SENNA LEAVES are moderately active in a jobbing way, and firm at 5 @ 18c as to quality.

TONKA BEANS, Angostura, are quoted at \$1.40 to \$1.50 for prime goods from the hands of an importer. Jobbers ask \$1.60 @ \$1.75.

VANILLA BEANS continue in good

jobbing request, with sales to the extent of 500 lbs. cut and whole, medium, within the range of our quotations.

DYESTUFFS.

CUTCH meets with a steady fair jobbing inquiry and prices are sustained upon the basis of 5¼¢ @ 6c for prime bales.

DIVI DIVI continues without change from the previous range of \$60 @ 70.

GAMBIER continues in moderate consumptive demand, and firm at the range of 4¼¢ @ 4½¢ for the store goods, and 4¾¢ for wharf.

INDIGO is in fair request and firm at quotations.

NUTGALLS, Blue Aleppo, are selling in small quantities at 18 @ 18½¢.

SUMAC, Sicily, continues in limited supply and held at \$62.50 @ 67.50; parcels in transit quoted \$60 @ 62.50.

CHEMICALS.

ACETANILID remains quiet, though 88c appears to be inside value for bulk.

ALUM offers with increased freedom and at easier prices. Lump can be purchased at \$1.60 @ 1.65, and ground \$1.65 @ 1.70.

ARSENIC, white, is selling quite freely in small parcels at the range of 8¾¢ @ 8¾¢ as to brand.

AMMONIUM CARBONATE of domestic make is scarce; the price of English has been reduced to 8¾¢.

BLEACHING POWDER, English, is held at \$1.75 @ 2 as to quantity, and the stock is greatly contracted. German offers down to \$1.63½.

BLUE VITRIOL is maintained at 8¼¢ @ 8½¢ as to make and quantity, with a moderate trade experienced.

BORAX is in improved inquiry, and we hear of large sales of California at 6½¢ @ 6¾¢.

CHLORATE OF POTASH continues dull, though there is no quotable change in price to report. German held at 10¼¢, and English 10½¢ @ 10¾¢ for crystals and powdered.

CALOMEL, Howard's English, has been advanced to 90c.

COPPERAS is unsettled, though sales are making at the range of 50 @ 60c. as to quantity.

CREAM TARTAR continues in request, with the market firm at 17c for crystals and 18c for powdered.

NITRATE OF SODA is slightly scarce on wharf and the market is firmer, with \$3.02½ @ 2.05 generally required.

QUICKSILVER is generally held at 51 @ 52c, though occasionally sales are reported at a fraction below the inside price.

SODA, Bicarbonate, is in quite an unsettled condition and the ruling quotations for English are extremely low, forward delivery goods being quoted 1½¢ f. o. b. while the quotation for American is 2.9c @ 3c.

SAL SODA, English, is quoted nominally 70 @ 75c, but this range is being shaded upon forwarded contracts. American quoted 72½¢ @ 75c less the usual discount.

ESSENTIAL OILS.

ANISE continues to reflect a rising tendency and quotations are firm at a fresh advance to \$2.87½.

CASSIA is also higher, only small supplies are obtainable at \$1.20 @ 1.25. The tendency is still in the direction of higher values.

CUBEB is slightly easier with sellers at \$1.20.

CEDAR, Florida, is offered more freely and at lower prices, 25c being named for barrel lots.

CORIANDER has made a notable advance over previous prices \$15 @ 18 being now required by holders.

CLOVE is held and selling in a small way at the range of 55 @ 60c.

PEPPERMINT remains quiet at \$1.60 @ 1.75 for bulk as to quality and \$2.25 for HGH. Forward contracts can, it is said, be made at a trifle less.

GUMS.

ARABIC continues in fair moderate request with the tone of the market strong at the recent advance; sorts held at 14 @ 15c.

ASAFOETIDA of the better grades continues scarce both here and in the London market. We are reported a few sales at the range of 26 @ 27c.

CHICLE is jobbing fairly at the range of 27 @ 30c with some holders quoting 26 @ 26½¢ for small lots.

CAMPOR has been reduced by domestic refiners to 39 @ 40c for barrels and cases respectively. The decline is attributed to the increased competition of the foreign product.

SHELLAC continues in very strong position though the demand momentarily is limited. DC is maintained at 88 @ 40c. VSO 84 @ 35c, diamond 81 @ 42c octagon B 85c., SS. 80 @ 31c and TN 25 @ 27c.

ROOTS.

CALAMUS, Bleached, continues in seasonable request and we hear of numerous small sales within the range of 22c @ 24c.

IPECAC is selling firmly in jobbing quantities at the range of \$1.15 @ \$1.25 which represents an advance of 25c over previous quotations.

JALAP is maintained firmly at 24c @ 26c with moderate sales at this range.

LIQUORICE continues in active inquiry and we hear of numerous transactions at the range of 7½¢ @ 18c.

SARSAPARILLA, Mexican, continues to offer at 6¼¢ @ 7c, but buyers exhibit considerable caution and manifest little disposition to close business at these figures.

SENEGA, Minnesota, is offering in this market at 31c.

SNAKE, Texas, of good quality is scarce and the prices are tending upward. Small sales are making at 80c and inferior quality can be obtained at 20c.

SEEDS.

CANARY continues in moderate demand with jobbing sales of Sicily at 8¼¢ and of Smyrna at 8c.

CELERY continues to offer at 9c and we hear of numerous jobbing sales at this figure.

CARAWAY, Dutch, is cabled firmer abroad and supplies here are held with increased confidence, 6¼¢ @ 6½¢ is asked though very little stock is offered at the inside figure.

HEMP, Russian, is quiet but steady at 2¾¢.

MUSTARD, California, is moving freely into channels of consumption at the range of 8c @ 8¼¢ for brown and yellow respectively.

POPPY is easier with sellers at 4c for German.

American Druggist and Pharmaceutical Record.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on the 10th and 25th of each month. Changes of advertisements and all copy for publication should be received by the 5th and 20th of each month.

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THE newly formed local section of the Society of Chemical Industry held first meeting on Monday, November 5th, in the hall of the New York College of Pharmacy. The inaugural address of the local chairman, Alfred Hy. Mason, consisted of a careful study of the development of chemical industries in the United States. Statistics were presented showing the value and extent of the chemicals manufactured and imported during 1893 and preceding years. The information contained in Mr. Mason's address is of special value to manufacturing chemists, and its publication in the Journal of the Society will be awaited with consider-

able expectancy. A full report is printed in our news columns.

THE MILITARY PHARMACIST.

IN accordance with a resolution passed by the American Pharmaceutical Association a bill will be introduced at the next session of Congress to improve the status of the pharmacists of the United States Army and Navy. Similar efforts were made in 1885 and at other times and the position of the naval apothecary has been somewhat improved, but is still far from what it should be.

In the United States Army the official title of the pharmacist is hospital steward and he receives about \$30 per month, lodgings, rations, etc. He must enlist and serve for six months as a private, and then apply for a position as assistant steward, from which he is eventually promoted to be steward, with a rank about equivalent to that of second sergeant. The sergeant however, may possibly win his way to a lieutenantcy, while the hospital steward has no possible hope of advancement.

In delightful contrast with this is the position of the pharmacists in European armies. In the Austrian Army, for instance, there are eight-eight pharmacists graded as follows:

Thirteen assistants (of the XI class of rank with the relative rank of lieutenant, the same as that of assistant surgeon); nineteen officials of the third class (of the X class of rank, relative rank of senior lieutenant, the same as surgeon); twenty officials of the second class (of the IX class of rank, relative rank of captain of the second class or of regimental surgeon of the second class); eight purveyors of medical stores (of the VIII class of rank, relative rank of major, or staff surgeon) and one director of medical stores (of the VII class of rank, relative rank of lieutenant colonel, of the same rank as surgeon lieutenant colonel of the second grade). The director of medical stores after serving three or four years is promoted to the VI class of rank with the relative rank of colonel.

The service is arranged on nearly the same plan in the German Army, the apothecary colonel (oberst apotheker) of the German Army corresponding in rank

and duties to the "Director" of the Austrian service. The Hungarian service was also organized on this basis about three years ago.

In the Italian Army there are 106 pharmacists divided as to relative rank as follows: 41 second lieutenants, 30 first lieutenants, 27 captains, 7 majors and one lieutenant colonel.

The relative rank of the pharmacist in the French Army is even higher, as will be seen by the fact that the 185 pharmacists in the service bear the following relative rank, second lieutenant, first lieutenant, captain, major, lieutenant colonel, colonel and major general.

In the Russian service there are some one hundred and thirty pharmacists, the highest relative rank obtainable being between that of colonel and major general.

There are no naval apothecaries in either the Russian or the Italian service. The naval apothecaries of the French service have the same relative rank as those in the French Army.

Pharmacists of the first class in the Japanese army receive 52 yen per month, which is the pay of a captain and is the same as that received by assistant surgeons of the first class. The value of the yen is about 75 cents. Pharmacists and assistant surgeons of the second class rank as first lieutenants and receive 32 yen per month. Pharmacists and assistant surgeons of the third class have the rank and pay (26 yen) of second lieutenants. These officers like others in the army receive additional pay when on special duty.

England, America, and we believe China stand apart in having the duties of the apothecary performed by a private or a non-commissioned officer. That the pharmacists of the country should exert their utmost influence to have the status of the military pharmacist improved will, we believe be conceded by every one who reads the above.

It may be argued that the military apothecary of the United States Army is not on the same plane as his European confrere as regards scientific attainments. In many cases this may be true, but if so it is due, not to the inferiority of American pharmacists, but to the manner in which the military pharmacist is appointed and to his inferior official and

social position in the army, for so long as the present system prevails the ambitious and able pharmacists will studiously avoid military service.

AN EFFICIENT OFFICER.

THE reappointment of Mr. Whitney of Lawrence as a member of the Massachusetts Board of Pharmacy will meet with the warm approval of that portion of the trade both in Massachusetts and elsewhere which appreciates the earnest, sincere and self-sacrificing labor which he has given to the advancement of the cause of pharmacy both as an individual and as an official during the past decade. That his reappointment was opposed is a fact to his credit for it shows that in the conscientious discharge of his duties he has not feared to make enemies. That this opposition was futile is to the credit alike to the Governor, State and to the drug trade of Massachusetts. We await with pleased anticipation the result of the enforcement of the recent law giving the Board supervision of druggists' liquor licenses. Mr. Whitney took an active part in securing the enactment of this measure and under the fearless administration of the statute which may be expected from himself and his colleagues, we may expect the fair fame of the calling to soon be purged of that stigma which has been attached to it in Massachusetts by the action of those few who have made pharmacy a cloak for the conduct of the liquor business.

THE PROPRIETORS AND THE LEAGUE.

SUBSTANTIAL appreciation of the benefits which will accrue to proprietors through the fruition of the Interstate Retail Druggists' League plan for the handling of the cut rate problem is shown by Seth W. Fowle & Co., 81 High street, Boston, who are the first of the proprietors to respond to the letter from the Interstate Retail Druggists' League to the manufacturers of proprietary medicines. This firm not only sent in their endorsement of the League plan by the next mail, but they signified the sincerity of their belief in it by sending with this endorsement a check for \$100, as a contribution toward the treasury of the League.

Now is the time for manufacturers of proprietary articles to win the good will and co-operation of the retail trade. The fact that efforts in the direction of regulating the cutting of prices have heretofore proven unsuccessful should not deter the proprietors from aiding in this movement, for never before has the organization of the retail trade, so far as it extends, been so thorough or so enthusiastic. The favorable replies to this appeal of the League will furnish forth a roll of honor to be remembered by the retail druggists of this whole country.

ANOTHER ADVERTISING SCHEME.

WE learn from various sources that a firm of enterprising advertising experts have turned their attention to pharmacy as a fine field for the promotion of clubs and societies. A club has in fact been already formed and the few drug clerks who figure on the list of incorporators have been assured that all expenses connected with its operation will be cheerfully paid by the promoters, providing (and here is where the milk of the coconut lies) that the drug clerks lend their names and influence (?) to procuring advertisements for the usual "year book of the society," "annual proceedings," "biographical history of the members," or whatever other name the publication may sail under. Experienced advertisers will not of course be taken in with schemes of this kind and it is for the benefit of a few firms that fail to discriminate between legitimate and illegitimate advertising mediums that the above lines are printed.

THE PUBLICATION OF EXAMINATION QUESTIONS.

WE took occasion in the issue for September 15 to comment upon a paper presented by H. M. Whitney, president of the Massachusetts Board of Pharmacy, at the Asheville meeting of the American Pharmaceutical Association upon the advisability of publishing the examination questions of boards of pharmacy. Mr. Whitney announced himself as decidedly opposed to such publication.

Under the head of "Correspondence" we print in this issue a communication on this subject from the pen of James Russell Parsons, Jr., director of the examination department of the University of the State of New York, which we commend for careful perusal to all connected with boards of pharmacy. It may not be without profit to place side by side the views of Mr. Whitney and of Mr. Parsons so as to bring out more prominently their difference:

MR. WHITNEY.

If Boards of Pharmacy are to be rated as institutions for learning, and it is desirable to encourage quiz books, and discourage general culture and colleges of pharmacy, aid and assist those whose only aim and purpose is to acquire just enough learning to secure the coveted parchment and ten or fifteen dollars a week from some department store or saloon druggist, then yes.

But if Boards of Pharmacy are established to protect the people from fraud, ignorance and mere pretenders, and elevate and dignify the calling, then no, a thousand times no!

MR. PARSONS.

Boards of examiners acting without the co-operation of all interested in their work will almost invariably fall into ruts and thus necessarily magnify the abuses to which all examinations are liable.

If questions are properly formed on broad and fundamental lines they will, in our judgment encourage general culture. * * * We procure the co-operation of our college faculties, principals and teachers and our questions under this fire of criticism are less liable to violation of pedagogic principles than if they were made by a small number of men.

Mr. Parsons, like Mr. Whitney, is a state official, charged with the examination of candidates as to their fitness for

the callings upon which they propose to embark. Neither Mr. Parsons nor Mr. Whitney are teachers, they are examiners, and we are inclined to think that the views of the former will find wide acceptance among many pharmaceutical examiners.

DIPHTHERIA ANTITOXIN.

IN the Spring of this year a final and favorable report upon Behring's anti-diphtheretic serum was issued from the Koch Institute for Infectious Diseases in Berlin, where the method of its production was elaborated by Dr. Behring.

At the meeting of German scientists in Vienna in the latter part of September, Dr. Behring delivered an address on "blood serum therapy" in which he said that it 'fills a hiatus in medical science in that it holds out the possibility of curing rapid and acute diseases for the treatment which up to this time no effective therapeutic means has been found.'

* * *

IN every infectious disease substances are formed in the blood which give immunity against subsequent attacks. This fact furnishes the basis for the whole of what Behring terms the "blood serum therapy." This substance, the presence of which in the blood confers immunity, has been named antitoxin. The problem for solution has been, how could this substance be produced outside of the veins of the patient himself and injected into the veins so as to obtain immunity for him without his having suffered from the disease? This problem seems to have been solved in the case of diphtheria by Behring.

Pasteur was originally of the opinion that only attenuated cultures would prove useful for immunising, but Behring, who has been studying the subject some years, was convinced that the question of the effectiveness of the serum was only one of quantity and that it was immaterial whether the culture was of full strength or whether it was attenuated.

* * *

THE first step in the process is the preparation of diphtheria toxin. This is produced by inoculating sterilized bouillon with the virulent bacilli of diphtheria, and cultivating them in a current of moisture at a uniform temperature for from three to four weeks (Roux's method), by which time a thick deposit of bacteria will have formed on the bottom of the vessel, above which will be found a thin layer of young bacilli. The cultures are then passed through a Chamberland filter and the clear liquid put into small, well-stoppered bottles and kept at an equable temperature, well protected from the light. One-tenth of a cubic centimeter of this diphtheria poison or toxin (oi

average strength) will kill a guinea pig weighing 500 grammes.

This toxin is then injected under the skin of a horse (Roux), that animal having given the best results, or sheep (Behring), in constantly increasing doses, until a large dose of toxin solution fails to produce any material disturbance in the system of the animal. Roux adds iodine to the toxin solution. The blood is then drawn in small quantities from the animal and from this the serum is separated. Further details of the process as carried out by Aronson were published in this Journal for June 14th, p. 318.

ITS EFFECT. WHEN this serum is mixed with virulent toxin the latter becomes innocuous, appearing to be neutralized. The toxin may even be injected and followed by an injection of serum some hours later without killing the animal so treated.

The prophylactic and therapeutic properties of the serum containing the anti-toxin are exercised, not alone against the toxin, but against the living poison itself. These qualities were discovered by Behring and constitute the basis of his treatment of diphtheria.

THE PUBLIC INTERESTED. NOT since the first announcement of the properties of tuberculin has there been so wide spread and so enthusiastic an interest manifested in any medical matter by the lay public, as is now being shown in diphtheria antitoxin.

Throughout Europe the newspapers have devoted much space to the subject and liberal popular subscriptions have been raised with a view to providing supplies of the serum for the treatment of diphtheria.

THE STEPS IN THE DISCOVERY. DR. ROUX of Paris thus summarizes the steps which have led to the present conditions of the serum therapy. "It is extremely simple. Loeffler and Klebs discovered the microbe of diphtheria, and studied its life history. Roux and Yersin, studying its clinical aspects, demonstrated that this bacillus was capable of evolving toxic material, and this was the starting point of the discovery of the toxin of tetanus and of several other microbic toxins. Now M. Behring has been able to derive an antitoxin. The steps of the process were these:

"1. The discovery of the microbe. Loeffler and Klebs.

"2. The proof that the microbe produces diphtheria.

"3. The diphtheria poison isolated. Roux and Yersin.

"4. The counterpoison obtained. Behring.

"Behring, therefore, has completed and crowned the edifice."

When Loeffler discovered the microbe, doubts existed whether it was the real pro-

ducer of diphtheria because the discover had failed to produce diphtheria paralysis with the microbe.

This Roux and Yersin afterwards succeeded in doing. Then they proved that its toxin (which they had discovered) gave exactly the same disease as the microbe itself, and that consequently the microbe only acted through its toxin.

Behring discovered the antitoxin, which is the serum of animals rendered immune against the action of the toxin.

THE PARIS ACADEMY. MM. BERGERON, cadet de Gassicourt, Proust and Straus as a committee of the Paris Academy of Medicine investigated the results obtained from the use of Roux's antitoxin and reported that the effects obtained seemed to them altogether remarkable, notably the striking improvement in the general condition, the rapid subsidence of the fever after the injection, the absence of pallor, depression, and prostration in the little patients. The Committee says in its report that there is every reason to believe that the serum has the like protective influence in man that it has in animals; therefore it can only be advantageous to make preventive inoculations of the serum in healthy persons, especially in children exposed to infection. The Committee concluded that "we are now in possession of a specific treatment of diphtheria as powerful as it is harmless."

FRENCH ENTHUSIASM. IN France the Chamber of Deputies has made a grant of \$20,000 toward the maintenance of stables for the preparation of the serum, while grants have also been made of \$2,000 by the Conseil Générale of the Department of the Seine and of \$1,000 by the Municipal Council of Paris. The President of France has also donated \$1,000 to the fund, while the cross of Chevalier of the Legion of Honor has been bestowed on Dr. Roux for his services in the matter. In the French provinces also the enthusiasm has taken practical shape by the subscription of funds to provide the serum for local use and to send physicians to Paris with a view to learning the details of the process of preparation.

While the French government is supplying the serum, it is sold, not given away, this being done with a view to avoid having the serum wasted.

In Vienna the wildest enthusiasm followed the publication of Dr. Behring's address and large sums were subscribed toward the establishment of serum depots.

Throughout Germany also there has been manifested the warmest interest in the new remedy.

Less general interest has been awakened so far in England and America, though the medical profession have watched the progress of events narrowly and with undoubted interest.

IN THE UNITED STATES. ONLY limited supplies have reached America, the first to arrive being a consignment of Aronson's preparation, which arrived about September 1 and which was all taken up within the week. Aronson's is of one strength only and comes in 2 and 5 gramme vials. Behring's solution is put up in 10 Cc. bottles, in three strengths, designated as No. 1, No. 2 and No. 3, which contain 600, 1,000 and 1,500 antitoxin normals respectively. The dose as a prophylactic for a person liable to be exposed to the poison is 60 antitoxin normals, and for a person after infection, during the incubation stage, 150 normals is sufficient. Supplies of Behring's solution were received on October 22, but the stock has been exhausted. Further supplies of both kinds are expected shortly. A few cases have been treated in which the results were about the same as those observed in Europe. So far the serum has not been produced in America, though the authorities of the Pennsylvania Hospital located at Philadelphia have recently determined to take up the matter at their own expense.

ITS FUTURE. JUST how much real value is attached to the new departure in therapeutics remains to be seen and not until the favorable results reported have been confirmed by thousands of skilled and careful clinicians can we feel assured that the "blood serum therapy" is all that its discoverer believes it to be. The history of tuberculin is too fresh in the minds of the medical and pharmaceutical public to allow them to be carried away by newspaper fanfare, but there is this difference that Behring and Roux claim more for diphtheria-antitoxin than Koch claimed for tuberculin. With the latter the extravagant expectations of the public were due to the sensational manner in which the subject was treated in the daily press. "It has taken countless men thousands of years to discover four remedies for three diseases," said Dr. Rossbach at the congress for internal medicine at Wiesbaden last spring, "and it were terrible to think that other thousands of years may be required for the production of four other specifics. The course so far followed is filled with too many dangers; particularly bad is the sanguineness.—I will not say the unreliability of too many observers." It is possible that we have added another to Dr. Rossbach's four remedies, but it will take some time yet to establish it as an indisputable fact.

IN the fifth edition of the National Dispensatory a paragraph relating to the use of guaiacol as a substitute for creosote appears by an evident inadvertence under the article *Guiaci resina*. The paragraph properly belongs two pages ahead, under the title *Guaiacolum*.

Written for the
American Druggist and Pharmaceutical Record.
SOME WINTRY SUGGESTIONS.

By A. J. REEDER, Ph.G.,
New York.

As the Winter approaches and trade begins to brighten, the enterprising disciple of Galen racks his weary brain, and asks himself, What shall I put up to draw the trade from various other establishments that compete with me in business? How shall I fill up my cases and counters with preparations which will not only be attractive but also recommend themselves by their intrinsic value. And after mature deliberation he proceeds to prepare various elegant toilet requisites and pharmaceutical preparations.

It is to help those who might not be so fortunate in the possession of good formulae for such preparations, as some of their wiser and more experienced brethren, that the succeeding collection has been compiled.

The formulas given have all been tried and found worthy of publication and they are submitted with the wish that they may prove as helpful to others as they have been to the writer.

Let us begin at the feet: who has not been asked for a chilblain remedy? Here are a few good ones?

I.

FOR UNBROKEN CHILBLAINS.

Ol. rosmarini.....	m xv
Camphorae.....	ij
Spts. terebinth rect.....	i
Axung. porci.....	ij

Signa.—External use. Rub 2 or 3 times daily on seat of affliction.

II.

FOR BROKEN CHILBLAINS.

Cera. flava.....	ij
Ext. plumbi Goulard.....	iss
Ol. olivar. opt.....	ij
Ol. camphorae.....	ij

Melt the wax and oil together, add the camphor oil and lastly the Goulards extract. Label, "Rub in well with continuous friction."

III.

RECOMMENDED BY DR. VALENTINE MOTT.

Tr. opii.....	i
Alcohol 60 per cent.....	iss
Ol. terebinth.....	iv
Fel boris, purif.....	ij

RHEUMATIC LINIMENT.

I.

Aq. ammoniac.....	
Ol. olivae ss.....	ij
Tinct. opii.....	ij
Ol. cinnamon.....	
Ol. sassafras ss.....	ij

II.

Tr. capsici.....	i
Ol. origanum.....	i
Ol. conii.....	ij
Lin. saponis.....	vi

Apply 3 or 4 times daily

OINTMENT FOR NEURALGIA.

Menthol.....	grs. xiv
Cocaine.....	grs. xv
Chloral.....	grs. x
Petrolatum.....	3 v.

Sig.—Apply to painful part.

OINTMENT FOR CHAPPED HANDS.

Menthol.....	grs. xv
Salol.....	grs. xxx
Ol. olivae.....	3 ss
Lanolin.....	3 ss

Sig.—Apply night and morning, rubbing in well.

Note.—Ointments put up in square porcelain jars look well and sell best, especially when adorned with a neat lithographed label.

LOTION FOR RED HANDS.

Liquid paraffin.....	§ i
Lanoline.....	§ iij
Vanillin.....	gr. ss
Ol. rose.....	gtt. ij

Sig.—Apply at night.

CAMPHOR ICE WITH GLYCERIN.

Spermaceti.....	§ iv
Cera alba.....	§ iv
Camphor pulv.....	§ iv
Sodii borat.....	§ ij
Stearin.....	§ xvi
Glycerin.....	§ xxxij
Ol. lavendulae.....	
Ol. limonis.....	
Ol. caryophylli.....	
Ol. bergamot ss.....	m xxv

Melt the wax, spermaceti and stearine, then dissolve the camphor in the warm mixture; mix the borax with the glycerine and stir into the hot mixture gradually constantly agitating. Then pour into suitable molds.

GLYCERIN CREAM.

Ol. amygdal. dulc.....	§ viij
Spermaceti.....	§ iij
Cera alba.....	§ i
Sodii borat.....	§ ss
Glycerin.....	§ ij
Aq. aurantii flor.....	§ i
Ol. neroli.....	gtt. v
Ol. rosear.....	gtt. ij

Melt the wax, spermaceti and oil together; dissolve borax in orange flower water and glycerin previously mixed. Pour the solution little by little into the melted mixture, constantly stirring until all the solution has been incorporated and a homogenous production results. Finally add essential oils to flavor and put in jars.

POMADE D'HEBE.

For wrinkles, etc.

Juice of the tubers of white lilies.....	§ ii
Mel depurat.....	§ iv
Cera alba.....	§ i
Aqua rose.....	§ iij

Melt the wax over a water bath, then add the other substances, stir till well incorporated and put up in collapsible tubes.

LOTION.

For irritated skin after shaving or exposure.

Tragacanth.....	§ i
Glycerin.....	§ iij
Alcohol.....	§ ss
Menthol.....	grs. xi
Aqua.....	§ xij

Warm the tragacanth and water together and let stand for two or three days; add then the menthol dissolved in alcohol and glycerin, and color with tincture of cudbear to a light pink. Perfume to taste.

MENTHOL CATARRH SNUFF.

Menthol.....	§ iij
Sacch. lact.....	§ i
Caffee tost pulv.....	§ xxx
Sacch. alb.....	§ x
Pulv. rad. iridis.....	3 v
Acid. boric.....	§ ij

MILK OF CUCUMBERS.

Amygdalae dulc.....	§ xvi
Amygdalae amor.....	§ ij

Grind together in mortar to mass, then melt over water bath the following:

Spermaceti.....	
Cera alba.....	ss
Ol. amygdal. dulc.....	ss
Sapo. Castile.....	ss

When melted, take from the mortar $\frac{1}{4}$ of the almonds and pour on the melted grease, stir quickly, then add remainder of the almonds, stirring all the while. When mass is homogenous pour on it little by little, stirring constantly, the following mixture:

Juice of ripe cucumbers.....	Oliv
Alcohol.....	§ x

A milky emulsion is obtained; strain

through cotton cloth, under pressure, and pour into vials. Perfume to taste.

The National Formulary.*

By E. H. BARTLEY, M.D.,
Brooklyn College of Pharmacy.

The demands of our time, makes it an impossibility for the physician, in the large cities at least, to be his own pharmacist. There are those who have attempted it, but the busy practitioner has neither the time nor the training to do it successfully. The training of modern medical students is based upon the assumption that they will not be called upon to act in such a capacity, hence no instruction is given in this branch of education. That is left to special schools maintained for that purpose.

THE PHYSICIAN'S DEPENDENCE UPON THE PHARMACIST.

For the present then, and for years to come the physician must depend upon the pharmacist to prepare his remedies for administration. This may be done by a wholesale manufacturer of ready made mixtures, pills, triturates, tablets, solutions, etc., etc., or he may trust to the dispensing pharmacist to prepare extemporaneously just the combination of remedies suited to the peculiar conditions presented by the case before him.

THERAPEUTICS NEGLECTED.

This last method presupposes, in the physician, a knowledge of the action of drugs, and more or less acquaintance with the physical and chemical properties of these drugs and their preparations. It is to be supposed that this knowledge it imparted in the medical schools or that the physician informs himself after graduation. It is to be feared, however, that there is a tendency in the present day of spending a disproportionate amount of time in the study of diagnosis, pathology, and clinical history of disease and neglecting the most important study of the exact action of drugs and their preparations.

THE TENDENCY TO PRESCRIBE PROPRIETARIES.

For this reason, perhaps, there seems to be a growing tendency to use mixtures which are to be found in the market ready made. It saves the effort of studying out nicer points of how to obtain certain therapeutic effects. It often, no doubt, leads to the selection of an elegant mixture which is not the exact one to meet the case, but near enough to quiet a pliant conscience, and saves time in writing the prescription. Indeed there seems to be no other way of making five minute calls. But even here there are difficulties to be met. The number of ready recipes is becoming so great, and there are so many of these thrifty manufacturers in the market that the ready-made practitioner becomes confused as to which of the rival preparations is the best, and is good for the most diseases.

THE PHYSICIAN MAKES THE DIAGNOSIS—THE PATIENT DOES THE REST.

The experience of any physician who attempts to keep pace with the enterprise of the manufacturers of patented, copyrighted, proprietary, sole agent preparations of this class must sooner or later lead him to the practice of medicine with a list of favorite recipes, or to disgust and nausea. Unless the prescribers of these nostrums are more careful than

*Read before the Medical Society of the County of Kings, October 16, 1894, and communicated by the author

they now are it will be but a few years when the more intelligent portion of the community will only call them in for a diagnosis, and they will do the rest. Or, as is now becoming quite general, they will make their own diagnosis and treat themselves with exactly the same remedies. The labels of many of these preparations name a list of diseases in which they may be used, and the dose to be used. When the name of such a remedy is once secured, there is no further use for the physician. How often are we called to see cases of neglected serious illnesses directly due to this cause. What better, we may ask, are these proprietary preparations than the patented ones?

READY MADE PRESCRIPTIONS.

The habit of specifying a particular make of a standard pill or mixture is also hurtful. In the first place the physician who thus specifies is not in a position to be a competent judge as to the merits of this or that maker's goods. He makes his choice usually on the recommendation of a salesman, the literature supplied with the sample, or the result, accidental or otherwise, of a trial of the sample on a single case. Or, perhaps he made his choice after reading a few testimonials from men he never heard of before, and published in one of the large number of so-called medical journals owned and published by the manufacturer.

TEMPTATIONS TO SUBSTITUTE.

This practice of naming the maker throws a strong temptation in the way of the druggist to substitute. How many makers' pepsins are kept by a first-class pharmacist? Twelve to twenty-five. Suppose you prescribe an unusual maker's pepsin, of which you can not know the digestive strength. Suppose that one is not among the twenty-five dollars' worth of ounce packages of pepsins on his shelves. Suppose another and better pepsin in every respect is used, from those the druggist has in stock. Although you could not detect the substitution and the patient might be far better off, you would condemn this action should you ever hear of it. Suppose the next day you should conclude to try another brand.

A PLEA FOR HOME INDUSTRIES.

It is fair to your neighbor, the druggist, to ask him to buy and put upon his shelves every new preparation to which your attention is called by the ever present drummer? Is it fair to your patient, to impose upon him the expense of buying an iron preparation costing twice as much as the same intrinsic value can be had for, on a regular prescription? Is it fair that the enormous profits on these proprietary preparations should be deliberately sent to Detroit, St. Louis, Philadelphia, New York, Germany, France, everywhere but to Brooklyn?

The claim is sometimes made that the average physician does not know enough about drugs to be able to write a prescription that will at the same time meet the conditions of the patient, be compatible, slightly, safe and half way tolerable to take. Whether this be true or not, we are in danger of forgetting how to prescribe; or rather the science of prescribing is being greatly neglected.

It must be admitted that there is in these days a stronger demand for more elegant pharmacy than was known years ago. This is especially true among

Americans, many of whose stomachs will not tolerate nauseous, bitter or even unsightly mixtures. A gelatin coated pill or a palatable well seasoned elixir may be given with much more satisfaction to physician and patient. For example I here present a Compound Elixir of Buchu that one would hardly suspect of containing that nauseating drug.

AGE IMPROVES ELIXIRS.

There is here a point of interest that I think is not generally appreciated. When these elixirs are allowed to stand for some months after preparation, they undergo a ripening process similar to wines and become much more palatable. Compare the fresh and old samples of Elixir Buchu Co. From conversations with practitioners I have been impressed with the fact that the profession generally are not as familiar with the National Formulary as they should be. This is especially so, perhaps, with the younger practitioners. Indeed I have frequently been told by such that they did not know that such a collection of elegant mixtures were to be had at any drug store. For this reason I have thought it might be a matter of interest and real service to the members of this society and to the pharmacists of the city to present here through the kindness of the Committee on the National Formulary of Kings Co. Pharm. Society, a series of some of these preparations.

THE NATIONAL FORMULARY.

Before doing so permit me to state briefly what this Formulary is. I have already stated some of the reasons which led the New York College of Pharmacy, the German Apothecaries' Association of New York and the Kings County Pharmaceutical Society in 1883, to appoint a joint committee of five from each association to confer and form an unofficial formulary of standard preparations to

compete with those put upon the market by certain wholesale houses.

A GAIN TO THERAPEUTICS.

It was believed that it would be a gain to therapeutics if a standard formulary could be agreed upon, so that the preparations could be kept in stock and be everywhere the same in composition. After three years of work, during which time this committee of fifteen held weekly meetings, they published the New York and Brooklyn Formulary, in 1885. This was sent to the members of the medical and pharmaceutical professions of these cities and elsewhere. The work was highly commended by the National Pharmaceutical Association, whereupon the committee presented the copyright to that Association.

The American Pharmaceutical Association appointed a committee, including the former committee, to revise and enlarge it and prepare a National Formulary. After between three and four years the National Formulary was published in 1888.

A GREAT WORK.

In its present form it represents the best efforts of the pharmacists of America, and has received the highest praise of foreign lands. The American association has continued a standing committee to keep it up to date.

These preparations can now be had in any part of the United States or Canada, and we can expect to find them of uniform composition everywhere.

Moreover, we can know what we are prescribing. They are not proprietary or patented, and are not sold at exorbitant prices. These preparations which I have the pleasure of showing you were collected from stores in various parts of the city, and were not prepared expressly for the exhibition. They certainly deserve careful examination and more extended use.



Durit is the name given to a substitute for rubber, which, according to Henriques possesses many valuable qualities.

Anodin is a new anæsthetic of unknown composition which is recommended in 4 per cent. solutions in opthalmic practice.

Administration of Castor Oil.—Schnabel states that castor oil may be easily taken in dark beer. It is almost unnecessary to state that Schnabel is a German.

An Imitation of amber is produced according to a recently issued German patent, by boiling articles made of bone in oil to which potassium bichromate has been added.

Improved Petroleum Oil.—The disagreeable odor noted in burning petroleum may be overcome by the addition to the oil of one per cent. of amyl acetate.—Le Corps Gras Indust.

Liquid Glue.—A process for making rapid drying, preservative liquid glue of great adhesiveness, by combining aqueous solutions of glue and chloral hydrate has been patented in Germany.

Brassikon, a new headache cure, consists according to the *Deutsche Chemiker Zeitung* of a solution of 80 minims of oil of peppermint, 90 grains of camphor, 70 minims of ether and 6 drops of oil of mustard in 8 fluid drachms of alcohol.

Salicylic Acid in Ringworm.—Salicylic acid is highly recommended as an application to ringworm. It may be used as an ointment, but is much better as a saturated solution in colodion. One application is often all that is necessary to effect a cure, but more may be necessary. The pain caused is not usually severe.—Mass. Medical Journal.

Calomel Soap for Syphilitics.—Monties recommends the application of calomel soap in syphilis. He proposes to use a soft soap made from almond oil and potash in the proportion of 10 parts of such soap, 6 parts of calomel and 2 parts of almond oil.

Calomel and Traumaticin in Syphilis.—Jullien recommends the use of the above combination in the proportion of 25 parts of traumaticin to 100 parts of calomel. The latter is said to be very quickly taken up by the organism when thus exhibited.—*Repertoire de Pharm.*

Salifebrin is obtained by the combination of acetanilid and salicylic acid in molecular proportions. It forms a permanent white powder, insoluble in water and easily soluble in alcohol. It colors blue litmus paper red. It is cheaper than salipyrin and is preferred by some.

To Preserve Lemons.—Lemons are invaluable in the sick room and cannot be replaced by citric acid or any artificial substance, consequently their preservation is of importance. They can be preserved (Sudd. Ap.—Z.) by rubbing the lemons over with wadding soaked in pure paraffin oil and then wrapping them in tin foil.

Ergot for Headache.—Thomson has successfully used ergot in large doses for migraine, giving one drachm of the fluid extract of ergot and an equal quantity of elixir of cinchona in water on the appearance of the premonitory symptoms. The patient should also lie down and keep quiet. In persistent cases the dose may be repeated after an hour.

Solvent for Shellac Pyroxylon, etc.—By mixing crude amyl alcohol with methyl alcohol and benzene and distilling the mixture with acetic acid and removing the water with calcium chloride a solvent is obtained for shellac, pyroxylon and similar substances. Ethyl alcohol may be substituted for amyl alcohol if desired, as can turpentine for the benzene.

Cryostase.—A German chemist has discovered a mixture which possesses the peculiar property of solidifying when heated and liquefying again on cooling. The mixture consists of equal parts of phenol, camphor and saponine with a small quantity of turpentine. It is said that saccharate of lime in concentrated solutions possesses this peculiar property. This mixture has been termed cryostase.—*Repertoire de Pharmacie.*

To Deodorize Benzene.—According to the Pharmaceutische Centralhalle the following method gives satisfactory results: First agitate the benzene frequently during 24 hours with a mixture of 1 part of potassium permanganate, 50 parts of water and 8 parts of sulphuric acid and after separating treat the benzene with a solution of 1 part of potassium permanganate, 50 parts of water and 2 parts of caustic potassa in the same manner as above.

A Microscopic Clearer.—Lenz recommends the use of a solution of sodium salicylate for clearing preparations for the microscope. This body has great advantages over chloral, as it very quickly transforms starch granules into a transparent jelly, which is not disturbed by the addition of glycerine or water, and still turning blue with iodine. Further, it has less detrimental effects on the ordinary tissues than chloral.—*British and Colonial Druggist.*

Toothache from a Hollow Tooth.—Dr. Marchande recommends the following in the *Journal des Praticiens*: First rinse the mouth thoroughly with some lukewarm antiseptic solution, then fill the

hollow tooth half full of cotton wadding saturated with a solution of one part of carbolic acid, one of cocaine muriate, one of menthol and 20 of glycerin; on top of this lay a piece of cotton saturated with a solution of mastic and benzoin or with collodion, so as to exclude the air.

Unguentum Vegetable or vegetable ointment is a recent addition to the emulsion-like bases, such as resorbin, Schleich's paste, etc., which have lately met with favor. The new ointment base, like the others of its class, is of German origin. It is a creamy, yellowish-white thin salve of a not disagreeable odor, which is composed of wax, oil and water. It dries rapidly on exposure to the air and therefore will be of service as a cooling application. It is incompatible with solution of subacetate of lead, nitrate of silver, and mercuric chloride.

Preservation of Colors in Herbarium Plants.—The discoloration of many flowers upon drying may be attributed to the presence in the atmosphere of ammonia. To counteract its injurious action Nienhaus (Schweiz. Wochen. f. Chem. u. Phar.) has hit upon the idea of pressing his plants between paper previously saturated with a 1 per cent. oxalic acid solution and dried. In this manner he has obtained most beautiful specimens of dried flowers of papaver-rhœas, one of the most difficult flowers to preserve unchanged. This idea may possibly be extended.

An Elegant and Brilliant French Polish.—De la Rogère gives the following (Nat. Drug.) as the formula for a polish for woods, which has a magnificent and unrivalled brilliancy: In 1500 parts of strong alcohol dissolve 80 parts sulphuric ether, 25 parts lavender oil, 25 parts spike oil, 80 parts boric acid, 7 parts camphor, 80 parts hard copal, 100 parts sandarac, 865 parts shellac, 80 parts benzoin, 80 parts balsam copaiba, and 5 parts tincture of cinnamon. This polish may be applied with a pencil, or with a polisher's "daub" (a ball of cotton covered with silk or linen). No oil is used on the latter when thus applied.

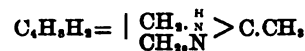
Sublimo-phenol.—This is a name given to a phenolated mercuric chloride, or rather a chloro phenolate of mercury, obtained by Desessuelle in slightly warming together an aqueous solution including one molecule of potassium phenolate, and a similar solution containing a molecule of bichloride of mercury. When the two solutions are brought together under a gentle heat, a precipitate is thrown down, which, on first forming, is of a brick-red color, which soon passes to yellow and ultimately becomes white. The product assembled and washed is treated with boiling alcohol of 95°, and on cooling of the liquor, the sublimo-phenol is deposited in colorless crystals. These crystals melt and decompose at about 210°C. They are exceedingly soluble in fused phenol, and also in boiling aqueous or alcoholic solutions of phenol. Used in antiseptic surgery.—*National Druggist.*

Demonstration of Wood-fibre in Paper.—Wolesky states in the *Papierzeitung*, that if paper either sized or unsized, be wet with a solution of diphenylamin in alcohol, to which sulphuric acid has been added, if wood-fibre be present it will show itself by an orange reaction that is very characteristic. The intensity of the color is in direct proportion to the amount of the fibre present. In colored papers, which yield to sulphuric anilin very feeble or no results at all, and even phloroglucin gives a very faint reaction, the diphenylamin test gives most satisfactory results, the orange coloration becoming very marked as the paper

dries. Yellow or orange-colored paper sometimes makes the detection of wood-fibre by this means somewhat difficult, but the difficulty is removed at once by bleaching the paper with a mineral acid, hydrochloric preferably.—*National Druggist.*

Honey Dew and its Effect on Bee Honey.—Dr. E. von Raumer has examined honeydew, a sweet sticky deposit on the leaves of various leaves and twigs which is produced by a kind of leaf insect, and reports the results (*Zelt. Analyt. Chem.* xxxiii 4. 1894). The honey-dew was collected by pouring water over the leaves, allowing to stand a few minutes, pouring off, clarifying with aluminum hydrate, evaporating the water to a syrup and purifying by repeated treatment with animal charcoal. In 1893 there was an abnormal quantity of honeydew noted and the author attributes the large proportion of dextrine observed in the honey of that year to the honeydew. The results of his investigations indicate that all honey contains some difficultly fermentable dextrin and that much honey, particularly that obtained from the conferrae or that contaminated with honeydew contains considerable quantities of unfermentable dextrin.

Lysidin, a New Gout Remedy.—Dr. Grawitz has experimented in Gehards clinic in Berlin with a new gout remedy known as lysidin, furnished by Prof. Ladenburg, of Breslau. In two cases he found that it had an excellent effect on acute attacks of gout without any apparent objectionable subsidiary action. Pain and swelling of the joints attacked promptly subsided after the exhibition of doses from 2 to 5 grammes in carbonated water. Lysidin is identical with the ethylene-ethenyl-diamin which was first prepared by A. W. Von Hoffman, but which he only superficially investigated. It has the following formula:



Lysidin is a very hygroscopic reddish-white crystalline substance of a peculiar taste, resembling the odor of a mouse, but which in a one per cent. ice solution is not at all disagreeable.—(*Pharmaceutische Zeitung*, xxix, p. 716).

Bone-marrow in the Treatment of Anemia.—Danforth has reported a case of pernicious anemia in which recovery seemed hardly possible, but in which excellent results were brought about by the administration of bone-marrow. This substance was at first administered in capsules, and subsequently with the food, but later the following mode of preparation was pursued: The anterior extremities of calves' ribs were comminuted, so as to thoroughly expose the cancellated tissue, and the fragments were placed in a jar and covered with glycerin, to the influence of which they were exposed for three or four days, being occasionally agitated. At the end of this time the liquid was strained through flannel, and the resulting fluid presented a reddish, syrupy appearance without pronounced odor and with very little modification of the ordinary sweetish taste of the solvent. This preparation was administered in doses of a teaspoonful three times a day, together with five drops of the official solution of potassium arsenite. As in the course of a few days the sweetish, sickly taste of the glycerin extract became disagreeable, and the stomach began to rebel, the following combination was employed:

Solution of potassium arsenite.....	5/16 drams
Acid sodium phosphate.....	3 ounces
Extract of bone-marrow.....	8 "

Of this a dessertspoonful was given after each meal. This combination proved entirely satisfactory, and the patient steadily gained in health, strength, and spirits, and in a short time presented every indication of restoration to former vigorous health. The hemoglobin rose from 35 to 80 per cent. and the red blood-corpuscles underwent a corresponding increase in number.

Carbolic Acid Hypodermically for Erysipelas.—Dr. Gaston reports in the *Medical and Surgical Reporter* that he has for twenty years employed this drug in the various forms of erysipelas with invariably good effect in promptly arresting the progress of the disease. He employs the following formula:

Carbolic Acid.....	f 3 i.
Glycerin.....	f 3 iil.
Distilled water.....	f 3 iv.

Mix and inject one syringeful in each portion of the size of a hand daily.

With this, local irritation has resulted from the injections in only a few cases. Where the thickened and hardened condition of the skin has rendered it difficult to introduce the needle, he has selected points on the border of the inflammation to make the injection, so as to reach the areolar tissue beneath.

On one occasion a toxic influence was manifested, but he has repeatedly used a syringeful of the solution in four different places without any untoward effect. It is proper to repeat the injections daily for three days, but he has never had occasion to continue the treatment longer.

Extracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.

(Continued from Page 262).

Veterinary Remedies—For Cattle.

The doses in the following formulas when not otherwise specified are intended for a full-grown ox, consequently when the medicines are to be administered to young, small or weak animals a corresponding reduction must be made in the size of the dose, while for unusually large and strong cattle the dose may be increased. For young cattle the following will serve as a general guide to the sedative dose required at different ages:

At one year 25 per cent. of the adult dose.
At two years 50 per cent. of the adult dose.

At three to four years 75 per cent. of the adult dose.

Where not otherwise specified the whole quantity is to be taken at one dose. The ailments peculiar to calves are treated of separately.

Bloody Urine.

This is generally brought about by eating sour food such as oxalis, either fresh or dried, which is generally the cause to be looked for.

Change the food. If the disease has been contracted while grazing, change to hay food, or if it has been contracted from dry place the animal at pasture or give it green food. If the change of food alone proves insufficient then use the following:

POWDER.

White lead, precipitated.....	3 gms.	(45 grs.)
Sodium acetate.....	10 gms.	(154 grs.)
Camphor, powdered.....	12 gms.	(184 grs.)
Precipitated chalk.....	120 gms.	(1848 grs.)

Mix and divide into six doses. Of these give one in a quart of bran mash morning and evening.

Inflammation of the Stomach and Bowels.

It is generally presumed that inflammation of the stomach and bowels is the result either of a cold or of eating some poisonous weed.

Warm mashes should be given as food and warm linseed meal water be given in place of cold water to drink.

DRENCH.

	Drachms.
A.—Chamomile flowers.....	250
Sodium sulphate, granular.....	75
Linseed oil.....	200
Salicylic acid.....	1½

Administer one pint every hour until constipation is overcome.

	Troy ozs.
B.—Chamomile flowers.....	31¼
Linseed meal.....	6¼
Linseed oil.....	31¼

Give one pint every two hours after the bowels have acted.

INJECTION.

	Troy ozs.
Solution of soap.....	31¼
Common salt.....	1¼
Linseed oil.....	3¼

Give one injection every hour until the bowels are relieved.

EMBROCATION.

	Troy ozs.
Linseed oil.....	3
Ammonia water.....	3
Oil of turpentine.....	3

Rub the belly with the above every three hours.

Diarrhoea.

Diarrhoea may arise from a cold or may be merely an accompaniment of other diseases.

The remedies used are usually efficient, but it is also necessary to cause the animal to perspire by rubbing and then to cover it warmly. It is also essential to put the sick animal in a warm, comfortable and roomy stall.

The food should be restricted to a little dry feed (good hay, etc.), no green food being permissible and in place of cold water, warm, starchy, or mucilaginous water should be given.

DRENCHES.

	Drachms.
A.—Nutmegs, powdered.....	12¼
Liquorice, powdered.....	12¼

Give in two doses with an interval of two hours, mixing each dose in a pint of warm water.

	Drachms
B.—Alum, powdered.....	5
Oak bark, powdered.....	12¼

Divide into two doses and administer each dose in one pint of warm water with an interval of four hours between the doses.

Diarrhoea in Sucking Calves.

Wrap up the animal warmly and administer internal medicines as below and also use suppositories to avoid irritating the bowels.

PILLS.

	Drachms.
A.—Precipitated chalk.....	4¼
Alum, powdered.....	4¼
Rye flour.....	5
Yolk of eggs, a sufficient quantity.	

Make into five pills and give one pill every five hours.

	Grains.
B.—Alum, powdered.....	23
Salicylic acid.....	23
Rye flour.....	270
Water, a sufficient quantity.	

Make into five pills and give one pill every five hours.

DRENCH.

Hydrochloric acid.....	70 minims.
Chamomile infusion.....	(5 to 100) 3¼ fl. ozs.

In cases of abnormally acid stomach, give the above in two doses with an interval of five hours.

SUPPOSITORIES.

	Grains.
Tannin.....	15
Mutton tallow.....	45
Cacao butter.....	135

Mix and form into four suppositories and insert one morning and evening after a passage of the bowels, inserting it as far up as can be done with the oiled finger.

Intestinal Worms.

Worms are readily produced by insufficient feeding, and are banished by purgative worm medicines. The important point is to give the animal but little food on the day previous, and to administer the worm medicine and the purgative at the same time.

WORM TEA.

	Drachms
Wormwood, in coarse powder.....	7½
Tansy.....	7½
Aloes.....	7½
Oil of hartshorn.....	3¼
Linseed oil.....	9¼ fl. ozs.

Mix and give in two doses, with an interval of five hours.

CEMENT FOR MOTHER OF PEARL.

	Drachms.
Isinglass in thin sheets.....	4
Mastic.....	5
Ammonium chloride, powdered.....	1
Alcohol.....	28
Water.....	32

Steep the isinglass in the water for one day, and then dissolve by aid of a gentle heat, add 16 drachms of alcohol, pass through a cloth strainer, and to the hot solution add, with constant stirring, the mastic, previously dissolved in 12 drachms of alcohol, and the ammonium chloride. The articles to be repaired should be warmed, the broken edges smeared with the cement and brought together, and so bound for six or eight hours.

(To be continued.)

Miscellaneous Formulas.

CEMENT FOR IVORY.

Isinglass.....	120 grains
White gelatin.....	240 grains
Mastic.....	12 grains
Alcohol.....	10 minims
Zinc oxide.....	30 grains
Distilled water, a sufficient quantity.	

Swell the isinglass and gelatin in seven and a half fluid ounces of distilled water; then dissolve in a water-bath, and evaporate down to 10 drachms, add the mastic, previously dissolved in the alcohol, and then incorporate the zinc oxide by trituration.

CEMENT FOR CELLULOID.

[Pharmaceutische Post.]

I. TO CEMENT CELLULOID TO PAPER OR LEATHER.	
Camphor.....	1 oz.
Shellac.....	6 ozs.
Alcohol.....	30 fl. ozs.

II. TO CEMENT CELLULOID TO WOOD, IRON OR GLASS, OR TO CELLULOID ITSELF.

Celluloid waste, rasped.
Acetone; of each a sufficient quantity.

DEPILATORY COLLODION.

[*N. Y. Medical Journal.*]

Iodine.....	11 grains
Oil of turpentine.....	20 drops
Castor oil.....	30 grains
Alcohol (strong).....	2½ drachms

COPYING INK FOR A TYPEWRITER.

Soap.....	30 grains
Glycerin.....	100 minims
Water.....	6 drachms

CEMENT FOR IRON.

[RABBI BEN AKIBA]

Flowers of sulphur.....	100 grains
White lead.....	100 grains
Borax.....	16 grains

Mix, and take as much of the mixture as is required for the job in hand; mix this to a thin paste with concentrated sulphuric acid, apply on the broken edges of iron, and press them together.

COLD PROCESS FOR MAKING "SPOT SOAP."

Cocoanut oil.....	13½ lbs.
Soda lye (18° B.).....	1 lb.
Potash lye (20° B.).....	2½ lbs.
Brilliant green.....	6½ ozs.
Purified oil of turpentine.....	16 ozs.
Finest powdered alumina.....	6½ drms.

First put the alumina in the mixing kettle, rub up the brilliant green (aniline) with oil, add this and the cocoanut oil, and rub together for half an hour; add the two alkaline solutions, previously mixed, in a tolerably large stream, stirring constantly, and finally add the oil of turpentine, and put in the "forms" and cover up. [The "forms" or "frames" are wooden trays with perpendicular sides, into which all newly made soap is put to "set." It is then cut into cakes, and if for use in the toilet these cakes are "milled" or pressed in molds of any desired shape.]

INK FOR ETCHING ON GLASS.

[*Bayrische Ind. und Gewerb. Blätt.*]

Sodium fluoride.....	9 drachms
Potassium sulphate.....	108 grains
Water.....	16 fl. ozs.

Make a solution and label "Solution No. 1."

Zinc chloride.....	16 grains
Hydrochloric acid (concentrated).....	10 fl. drachms
Water.....	16 fl. ozs.

Label "Solution No. 2."

Mix equal quantities of the solutions in a gutta percha or leather vessel, or in a glass vessel the interior of which has been covered with a layer of paraffin, or in a hollow in a piece of paraffin wax.

MUCHLAGE PENCILS.

[*S. APPLE.—Pharmaceutische Post.*]

Dextrin.....	7 drachms
Glue (best).....	13½ drachms
Zinc white.....	1 drachm
Glucose.....	5 ounces
Water.....	1 fl. ounce

Dissolve the dextrin by the aid of heat in one fluid ounce of water, and glue, and sift in the zinc white. After standing eight hours, warm in a water bath until the glue is melted; then add the glucose, pre-

vously melted in a water bath, mix, and pour into pencil-shaped moulds.

VARNISH FOR TINNED ARTICLES.

	Ounces
Turpentine, gum.....	8
Linseed oil, boiled.....	4
Amber resin.....	4
Shellac.....	1

Melt together, and color with curcuma, gamboge, anilin or any desired color.

CLOUDY AMMONIA.

[*Chemist and Druggist.*]

Best soft soap (or green soap).....	3 j
Borax.....	3 ij
Eau de Cologne.....	3 ss
Liq. ammonia fort.....	3 vss
Aquam ad.....	3 xij

Rub up soap and borax with water until dissolved, strain, add other ingredients. You may vary the perfume to suit price, etc.

FOR THE NIGHT SWEATS OF PULMONARY TUBERCULOSIS.

Ext. secal. cornuti.....	3.0
Spirit dilut.....	3 ij
Glycerin { ss.....	5.0—M.
Aque dest {	

For subcutaneous injection: 1 c. centi-

meter at bed time.—*Goldenbach, Deutsche med. Wochenschr., 1894, No. 26.*

Pharmacy in Japan.

Professor Ogata, of Tokio, tells the *Pharmaceutische Zeitung* that in Japan, as a rule, the offices of physician and pharmacist are combined in the same person. Nearly all medical men do their own dispensing, and are paid, not for their professional visits, but for the medicine supplied by them. The average charge for medicaments is about 2d. per day. The Japanese medico-pharmacist usually keeps two or three assistants, who prepare the medicines for him. Efforts have lately been made to separate the medical and the pharmaceutical professions, but so far without much result, most of the medical men opposing the change.

Patent Medicines in Italy.

Hitherto there has been a considerable demand for English "patent" and other medicines, a variety of which have been kept in stock by the leading chemists, but the British Consul at Genoa is informed that by a recent regulation, all compounded medicines sold in Italy must bear outside the package a recipe showing the ingredients of which they are composed.

THE MEETING OF GERMAN SCIENTISTS AT VIENNA.

THE meeting of the "Deutscher Naturforscher und Aerzte" and of the International Congress of Food Chemists was held at Vienna from September 28rd to 29th. Papers were presented before the various sections composing the association and we give below abstracts of some of the more valuable of those relating to pharmacy. A list of the papers presented before the section on pharmacy is given in our news columns.

The Estimation of Sugar in Urine.

BY DR. AD. JOLLES,

Vienna.

The author arrives at the following conclusions based on very large experience: Sugar is not a constituent of normal urine as it is only by operating on a very large quantity of such a urine that traces of sugar can be discovered. It is essential that a specimen taken from the collected urine of the entire 24 hours be used in examining for sugar, as the author cites a case in which at one time of the day the urine of a diabetic patient had a specific gravity of 1.005, and showed only very slight traces of sugar, while that taken the next morning had a specific gravity of 1.029 and contained 1.8 per cent. of sugar. A high specific gravity does not, however, necessarily indicate the presence of sugar as urine is not infrequently found which is rich in the normal constituents and uric acid, but entirely free from sugar, though the specific gravity goes as high as 1.028 to 1.032. The average specific gravity for normal urine, he places between 1.018 and 1.022. Small quantities of sugar do not materially affect the specific gravity.

THE TROMMER AND WORM-MULLER TESTS.

The Trommer and Worm-Muller tests allow of the recognition of 0.08 per cent. of sugar, but generally the results are so ambiguous that as much as 0.24 per cent. may sometimes be overlooked. Among the reducing substances which obscure the conclusions when looking for sugar,

besides uric acid and creatinin, the urinary pigments and the bile pigments occupy an important position. The author has observed the presence of 0.16 per cent. of uric acid, which is sufficient to cause a noticeable reduction. The quantitative examination of urine rich in uric acid but entirely free from dextrose yielded with Fehling's solution results which, calculated as grape sugar, varied from 0.06 to 0.24 per cent.

When it is borne in mind that bilirubin has always a pronounced tendency to take on more oxygen, one molecule being capable of taking up 5 of oxygen in the change to a higher product it will be seen how important a role it plays in the reduction of Fehling's solution. A similar state of affairs exists in relation to the various urinary pigments which are found particularly in reddish or dark-brown urine, even though they are not bilirubin itself.

THE INFLUENCE OF AMMONIA.

The ammonia which would hold the cuprous oxide in solution thereby obscuring the test amounts in normal urine to not more than 0.06 to 0.88 grammes for the 24 hours. Generally, however, decomposition has already set in, in the samples of diabetic urine sent for examination, by reason of having been kept standing too long, and the urea is to a greater or less extent decomposed, so that the ammonia present under some circumstances may exert a decidedly disturbing influence.

The author had observed in some specimens rich in ammonia that no reduction of copper occurred at all in the Trommer test, although, beyond doubt, they con-

tained small quantities of dextrose, in one case as much as 0.3 per cent. The fact that in samples containing very little ammonia (those observed contained 0.008, 0.006, 0.02 and 0.07 per cent.) the precipitation of cuprous oxide is prevented on boiling, leads to the conclusion that there are other constituents beside ammonia which possesses this inhibitive property. It should be borne in mind also that certain constituents of urine may be converted into ammonia on boiling the alkaline solution.

ON SEEGEN'S AND NYLANDER'S TESTS.

The author was unable to obtain satisfactory results with Seegen's test. Nylander's test is unreliable in the presence of less than 0.3 per cent. of sugar. Furthermore any albumen present must not be precipitated but must be removed by boiling, as otherwise traces of sugar may be carried down with the precipitate. The presence of blood and of pus also have a disturbing influence and since these substances cannot be removed without affecting the sugar content, cases not infrequently occur in which Nylander's test indicates a very small quantity of sugar as being present in urine which does not contain any trace of dextrose.

THE INFLUENCE OF DRUGS ON THE RESULTS.

It must be remembered that certain medicines, such as rhubarb, oil of turpentine, large doses of quinine, arsenic, salicylic acid, sulphur, the mercurials and iodides, may exert a disturbing influence.

Other reduction tests, such as the Knapp test, with an alkaline solution of mercuric cyanide, the test with indigo solution, with picric acid, etc., are not conspicuously valuable on account of either their certainty or their sharpness, rather resembling the Nylander test in both respects.

THE POLARISCOPE UNCERTAIN.

In 200 cases in which Jolles made comparative examinations with the polariscope and with the Fehling-Wendrin test only 46 cases yielded approximately uniform results; in 86 specimens the difference varied from 0.1 to 0.6 per cent.; in 52 tests the variation ranged from 0.4 to 1 per cent. and in the remainder from 1 to 1.6 per cent. In addition to the optically active normal constituents of urine whose presence vitates the results of observations made with the polarimeter, the presence of drugs may also have a disturbing influence. A specimen in which glycuronic acid occurred, for instance, possessed a dextro-rotatory power of 0.8 notwithstanding that the total absence of sugar had been completely established. Milk sugar, which is present in the urine of parturient women, is also confusing, as it is dextro-rotatory. Furthermore, the laevo-rotatory beta-oxy-butyric acid which, associated with acetone and acetic acid, is always present in all of the severe forms of diabetes mellitus, may prove a disturbing factor.

Among the other substances which influence the results of polarimetric observations is the laevulose, which appears after the patient has partaken freely of fruit. After the administration of benzo-sol Jolles observed the presence of hippuric acid and of gualacol in the urine, and furthermore the investigations so far carried out indicate that benzo-sol forms with some product of the organism a substance a solution of which has a laevo-rotatory action in the polariscope. Preparations of the ericaceae contain arbutin and quinic acid, which also affect polariscopic observations.

THE FERMENTATION TEST.

To properly carry out the fermentation test it is essential to use yeast which is entirely free from starch; efforts to hasten the process by raising the temperature are not to be commended. This test is not to be relied upon in the presence of less than about 0.1 per cent. of sugar.

To that class of sugar tests which can be resorted to in dubious cases as yielding certain results the phenylhydrazin test belongs. The statement of Geyer that this gives a crystalline precipitate with the majority of normal urines is incorrect. The crystals of glycuronic acid combinations not infrequently appear as indicated above. The duration of the boiling has no influence on the formation of the combinations of glycuronic acid, although Hirschel states the contrary.

The glucose-azone crystals, though similar to those of the glycuronic acid combinations, can be definitely distinguished by means of the microscope. The limit of sensitiveness of the phenylhydrazin test for sugar in urine is on an average at about 0.03 per cent. The sensitiveness is less in concentrated urine, rich in urates and albumin.

Jolles recommends that in applying the phenylhydrazin test the test tube after boiling (about an hour) be allowed to cool off slowly in a water bath and to stand for from 12 to 14 hours.

THE HOPPE-SEYLER TEST.

The Hoppe-Seyler test, which depends upon the formation of indigo, is not to be recommended as a final test for glycosuria. It is sensitive to about 0.4 per cent., but the following modification is suggested by Jolles as being of value for a rapid examination as to the presence of 1 per cent. of sugar or over, on account of the ease and rapidity with which it can be carried out.

JOLLES MODIFICATION OF THE HOPPE-SEYLER TEST.

Heat 100 Cc. of a 0.5 per cent solution of ortho-nitro-phenylpropionic acid in soda solution and water in an Erlenmeyer flask to the boiling point. Then add the urine under examination drop by drop from a burette until the liquid shows a clear blue color. If 3 Cc. of urine or more are required to produce the blue color it can be assumed that the urine is free from 1 per cent. or more of sugar. If a decidedly blue coloration is developed with from 0.1 to 0.5 Cc. of urine it may safely be stated that (the above exceptions being noted) 1 per cent. or more of sugar is present.

Aluminum Boroformicate.

BY PROF. J. MARTENSON,
St. Petersburg.

The old familiar alum has recently been brought out in various new combinations, such as solution of aluminum acetate, aluminum aceto-tartrate, aluminum formicate and alumnol. These are for many cases, too irritating in their effects and the desire of many leading clinicians to obtain a preparation of aluminum which while preserving high astringent and disinfecting properties would still be so mild that its application could be borne for a considerable period, led Prof. Martenson to prepare aluminum boroformicate.

This preparation crystallizes in large, well-defined crystals with a mother-of-pearl lustre. The method of preparation, which follows, is simple.

Add freshly-precipitated and well-washed alumina to a mixture of 2 parts

of formic acid, 1 part of boric acid and 6 to 7 parts of water until it no longer dissolves, and use the clear solution direct after the strength of the solution has been determined, or, if preferred, the solution may be evaporated down to crystallization.

The specific gravity of a 10 per cent. solution is about 1.064, that of a 20 per cent. solution about 1.110. The alumina must be well washed, as otherwise it is very prone to deposit. It is not easy, however, to wash large quantities of alumina. The author recommends that in winter the partially-washed hydrate be allowed to freeze and that it then be laid out on a large strainer where it can be more rapidly and easily washed.

The boroformicate dissolves slowly but completely in water and in diluted solutions, keeps without noticeable decomposition. It is also soluble in diluted alcohol. It has an acid reaction, and a sweetish, astringent and not very sharp taste.

Additions of ammonium, sodium, or potassium carbonate produce at first a cloudiness which disappears on further addition of the alkali, even the addition of tannin failing thereafter to cause precipitation. On evaporating the solution direct combinations with the alkali is obtained which are soluble in water but which have not been obtained in crystalline form.

The boroformicate has been used for some time with marked success in the children's hospital of St. Petersburg.

Secretions and Their Formation.

BY PROF. A. TSCHIRCH,
Berlin.

The author calls attention to the fact that in all the resins so far examined save in opoponax there was a certain general resemblance since they all consist of esters of aromatic acids together with a peculiar group of alcohols which Tschirch calls resinols. These latter may be divided into two groups, one of which consists of resinols in the narrower sense of the word and the other of resino-tannols, that is such as resemble tannin. Leaving out of consideration for the moment the colorless, crystallizable resinols, the benzo-resinol and the chironol (from opoponax), we find a peculiar relation on the one hand between the aromatic acids which form the resin esters (resins) and on the other, between the ester-forming resino-tannols. The following resin-ester-forming aromatic acids have so far been identified:

Benzoic acid = C_6H_5COOH (In tolu and Peru balsams and in Siam benzoin).

Salicylic acid = $C_6H_4(OH)(COOH)$ (In ammoniac).

Cinnamic acid = $C_6H_5CH=CH.COOH$ (In tolu and Peru balsams, Sumatra benzoin and storax).

Paracumaric acid = $C_6H_4(OH)(CH=CH.COOH)$ (4) (In acaroid).

Umbelliferon = $C_6H_4(OH)(OCO.CH_2.CH_2)$ (in galbanum and sagapneum). This last is really more of an alcohol than an acid, but it is very readily converted into dioxycinnamic acid, which in turn is converted into umbelliferic acid.

The resino-tannols so far investigated are:

Siam resino-tannols, $C_{11}H_{14}O_8$ (in Siam benzoin), Suma resino-tannol, $C_{11}H_{14}O_8$ (in Sumatra benzoin).

Sto-resinol, $C_{11}H_{14}O$ (in storax).

Galba-resino tannol, $C_8H_{10}O$ (in galbanum).

Peru-resino-tannol, $C_{11}H_{14}O_8$ (in Peru balsam) and

Tolu-resino-tannol, $C_{17}H_{16}O_8$ (in Tolu balsam).

On studying these formulas a singular uniformity will be noted. Excepting the tolu-resino-tannol, it will be observed that in the molecule 6 atoms of carbo-hydrogen occur repeatedly. Tolu-resino-tannol and Peru-resino tannol are, however, members of a homologous series, $(+CH_2)$. Where the resino tannols belong according to their constitution is not yet clear. The constitution of the coniferous resins is not yet entirely understood. Only this much is determined; that in them not only fatty acids, but also resin acids, of the abietinic acid series which form esters can occur.

The author then spoke at some length on the formation of secretions, his theory that this was a function of the membrane having received general acceptance.

The Valuation of Drugs and of Galenical Preparations.

By Prof. H. BECKURTS,

Brunswick.

After some remarks upon the importance of a chemical examination of drugs and galenicals the author submitted the results of further work along the line shown in his paper presented at the last general meeting of the German Pharmaceutical Society, which results are summarized below:

NUX VOMICA.

The alkaloid was estimated as follows:

A.—By percolating 10 grammes of the powdered drug with diluted alcohol, shaking out the alkaloids according to Beckurts' method with chloroform from an ammoniacal solution, and titration with centinormal acid solution.

B.—By percolating with diluted alcohol and shaking out the alkaloids according to Beckurts' method with ether and chloroform.

C.—By digestion of the powdered seed and shaking out as under A.

D.—By digestion of the powdered seed with diluted alcohol and shaking out as under B.

E.—By a method based on that of Keller.*

The percentage results obtained were as follows:

	A.	B.	C.	D.	E.
1	3.39	2.4	2.25	2.15	2.112, 2.169
2	2.38	2.36	2.27	2.16	2.1124, 2.25

BELLADONNA LEAVES.

The alkaloidal content was determined by the following methods:

A.—By percolating the powdered belladonna leaves with a mixture of alcohol and chloroform, and shaking out three times according to Beckurts' method.

B.—Same as above but using ether-chloroform for shaking out.

D.—By digestion with diluted sulphuric acid and shaking out three times with chloroform.

D.—By digestion with diluted sulphuric acid and shaking out once with ether-chloroform.

E.—By a method based on that of Keller.

The percentage of atropine obtained was as follows:

	A.	B.	C.	D.	E.
1	0.486	0.4826	0.458	0.493	0.4797
2	0.42772	0.40171	.....	.....	0.4101
3	0.509	0.50575	.....	.....	.....

*See AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for July 25th, page 34, and for August 10th, page 96.

BELLADONNA ROOT.

The alkaloidal content was determined in the same manner as with the leaves. The percentages present are shown here-with:

	A.	B.	C.	D.	E.
1	0.5404	0.566	.....	0.5139	0.5433
2	0.53176	0.5346	.....	.....	0.5317
3	0.53754	0.52309	0.5163	.....	.....

HYOSCYAMUS HERB.

The determinations were made in the same manner as with belladonna leaves and root. The following percentages of atropine were found:

	A.	B.	C.	D.	E.
1	0.09726	0.09537	.....	.....	.....
2	.....	0.08862	0.0896	0.09	0.0712
3	.....	0.08959	.....	.....	0.0722

STRAMONIUM LEAVES.

The same methods were used as for belladonna. The percentages of alkaloid found were as below:

	A.	B.	C.	D.	E.
1	0.3179	0.3083	0.36	0.332	0.370
2	0.3179	0.3198	.....	0.3082	.....

CONIUM HERB.

The following percentages of alkaloid were found according to processes A and B:

	A.	B.
1	0.0385	0.03175
2	0.03386	0.03487
3	0.03083	.....

IPECAC ROOT.

Following the same processes as with belladonna the annexed percentages of emetin were found:

	A.	B.	C.	D.	E.
1	2.235	2.309	2.281	2.26	2.39
2	2.245	2.389	2.263	2.336	2.37
3	2.174	2.194	2.086	2.04	2.086

Prof. Beckurts has also examined other drugs, such as *hydrastis canadensis*, cinchona bark and the leaves and roots of aconite.

From these he deduced that with the exception of *hyoscyamus* herb and *conium* herb the results yielded by Keller's process were satisfactory and showed a gratifying degree of uniformity as compared with the results obtained by other methods.

The Mydriatic Alkaloids.*

By THEODORE G. WORMLEY, M.D.,

University of Pennsylvania, Philadelphia, Pa.

Several different alkaloidal substances or principles have been discovered as existing in the mydriatic plants; but it is now generally conceded, especially through the researches of Ladenburg, that these consist of three distinct isomeric bodies, having in common the formula $C_{17}H_{15}NO$, and named respectively Atropine, Hyoscyamine and Hyoscine, the last named being found only in *hyoscyamus niger*, associated with hyoscyamine. The substances formerly described as Daturnine, from *Datura stramonium*, and Duboisine, from *Duboisia myoporoides*, are now considered to be identical with hyoscyamine.

Atropine, hyoscyamine and hyoscine are closely allied not only in their chemical composition, but also in their physiological effects and their general chemical properties, yielding much the same results with the ordinary reagents. According to Ladenburg, atropine fuses at 114 degrees C., hyoscyamine at 108 degrees C. In the free state, hyoscine forms a syrupy liquid, which, with acids, forms crystallizable salts. Other differences

have been pointed out in regard to these principles, but these would rarely serve for discrimination in ordinary toxicological investigations.

In the following comparative examination of some of the tests for these substances, recent samples of the three alkaloids as prepared by Merck, Trommsdorff, and by Kahlbaum, were employed. Only one preparation, however, of hyoscine (Kahlbaum's) was examined, this being in the crystalline state, as hydrochloride.

VITALIS TEST.

This test, as is well known, consists in treating the solid alkaloid or one of its salts with a drop or two of nitric acid, evaporating to dryness on a water-bath, and treating the cooled residue with a drop of a strong alcoholic solution of potassium hydroxide, when a deep violet coloration is produced.

On comparing the above samples of the three alkaloids, in equal but varying quantities, side by side, under this test, no appreciable difference was observed in the results. It has been stated by some writers that under this test atropine yields a yellow coloration, whereas hyoscyamine yields a purple color; but this difference did not exist in the preparations examined.

AURIC CHLORIDE TEST.

This reagent throws down from aqueous solutions of salts of the alkaloids, even when quite dilute, a bright yellow precipitate of the aurochloride of the alkaloid. The precipitate from the hyoscine, being the least soluble of these gold salts, is notably greater in quantity, and it more promptly assumes the crystalline form than the precipitate from like solutions of either of the other two alkaloids.

If a drop of a 1-100th solution of the alkaloids be treated with a drop of the reagent, the hyoscine solution yields a very copious precipitate and soon the mixture becomes a solid, confused crystalline mass. The precipitate from atropine stands next in quantity, that from hyoscyamine being least. No marked difference was observed in the color of the precipitates, even on spontaneous evaporation to dryness.

A drop of 1-1000th solution of the alkaloids gave with the reagent, very uniformly in the case of hyoscine, a precipitate which quickly formed crystalline lamina or leaves; while that from atropine formed minute granules, and that from hyoscyamine crystalline blocks or masses.

BROMINE TEST.

As we have pointed out elsewhere, a solution of bromine in bromohydric acid throws down from solutions of atropine and of hyoscyamine, even when highly dilute, a yellow amorphous precipitate, which is soon converted into characteristic crystals, no marked difference being observed between the reaction of the two alkaloids. With an aqueous solution of hyoscine, the reagent produces a voluminous yellow precipitate which soon becomes converted into minute globules; these change to large yellow drops, which slowly dissolve to a colorless solution. In no instance were crystals obtained by the reagent from a 1-100th or more dilute solution of this alkaloid.

This reaction, therefore, serves to discriminate atropine and hyoscyamine from hyoscine, at least from the preparation under examination.

The bromine reagent may be very satisfactorily applied to atropine and hy-

*From the American Journal of Pharmacy.

oscyamine, and their salts, in the solid state. If a minute portion of either alkaloid be touched with a small drop of the reagent, it is immediately converted into a mass of crystals, consisting of rough needles, twig-like masses and bright yellow plates.

The residue from one drop of a 1-1000th solution of the alkaloids yields with the reagent a mass of crystals of the usual forms; and the residue from a drop of a 1-10000th solution, gives a very satisfactory deposit of crystalline needles and granules.

This reaction, as in the case of solutions of the alkaloid, will manifest itself in the presence of comparatively large proportions of foreign matter. Thus, if a drop of a 1-1000th solution of the alkaloid be treated with a drop of ordinary urine, and the mixture evaporated to dryness, the residue will yield, under the reagent, a very satisfactory crystalline reaction, although the proportion of urine solids to the alkaloid present is about 50 : 1. Crystals may be obtained from even a much less quantity of the alkaloid mixed with amount of urine solids.

If the Bromine reagent be applied to a minute drop of the syrupy solution of hyoscyne, it is immediately converted into a mass of reddish-yellow globules, which soon change to bold groups of faintly yellow crystals, these being quite different in form from the crystals obtained from the other two alkaloids.

The residue from a drop of a 1-100th solution of hyoscyne yields, under the reagent, a mass of yellow globules, which soon become converted into groups of bold crystals. From the residue from a 1-1000th solution of this alkaloid no crystals were obtained, the precipitate consisting alone of oily drops.

PIRCIC ACID TEST.

A drop of a 1-100th solution of atropine, when treated with a drop of an alcoholic solution of this reagent, yields a voluminous yellow precipitate, which slowly becomes converted into minute yellow drops. If, however, the mixture be stirred with a glass rod, it quickly yields beautiful groups of yellow crystals, as figured in *Micro-Chemistry of Poisons*. Pl. xiii, Fig. 1.

A drop of a similar solution of hyoscyamine yields, with the reagent, results not to be distinguished from those from atropine.

A like solution of hyoscyne gives, with the reagent, a yellow precipitate, which remains amorphous; but on stirring the mixture it slowly becomes, on standing, a dense mass of fine, feathery or plumose crystals, markedly different in form from the crystals of the preceding alkaloids. These crystals are less readily formed than those from either atropine or hyoscyamine.

More About Kola.*

The kola nut is well known. This precious African fruit by a dose of forty grains a day enables negroes to make, under a tropical sun, long and difficult journeys with no trouble and no shortness of breath while climbing fatiguing ascents and at the same time carrying packages weighing eighty kilograms. The stories of explorers usually confirm this statement. The English consul at Bahia tells of old negroes carrying for four leagues bags of sugar weighing eighty kilograms (176 pounds).

In Europe, however, this famous nut

did not maintain its reputation. The pharmacists, in their preparations, managed to strip it of its active principles. About two per cent. of caffeine were found, and it was supposed that caffeine must be its essential component. The experiments which were undertaken in the army in view of its benefit during the fatigue of a campaign were interrupted by this supposition and also by the distasteful form given to this new product.

A distinguished explorer, Dr. G. Le Bon, in an article on a recent book by Prof. E. Heckel, explains to us how the kola nut must be used in order to feel all its good effects. Like the negroes of Africa, we must slowly masticate bits of the fresh nut. The dry nuts, the only ones to be found at the pharmacists' and which serve as the basis of the different preparations of kola, come from varieties which the negroes do not esteem, and are often found to belong to a family which does not contain a trace of the alkaloids that give it its value. It would be easy to obtain the fresh nut from the coast of Africa at the price of two or three francs a kilogram, and to preserve it in this condition for more than a year. Dr. Le Bon has preserved it for more than six months covering it with fresh leaves of vegetables, renewing them often, and he thinks it could be kept much longer by dressing it with sugar or making a sweetmeat of it.

The kola nut is yet very imperfectly known chemically considered. Caffeine and theobromine are found and a substance which becomes red on exposure to the air and is decomposed into caffeine and a coloring matter by the presence of water. The excitation produced by caffeine is chiefly cerebral; but the excitation from the kola nut is chiefly muscular.

Dr. Le Bon has satisfied himself of the value of a combination of ten centigrammes of caffeine and two centigrammes of theobromine. The effects observed have appeared to him analogous to the effects produced by the kola. They were observed with the dynamometer during laborious exercises of a mental character.

Agencies of Sudden Deaths.

William B. Thompson of Philadelphia, contributes an interesting article on "Agencies which augment the mortuary column" to the October number of the *P. C. P. Alumni Report*. He says a glance at the table of compiled statistics of the deaths by poison, accidental and intentional, including, of course, acts of suicide, recorded by the registrar-general (England and Wales), 1892, shows a wide range of fatal agents in the form of drugs and preparations of drugs.

Lead poisoning is quite prominent, although it hardly comes under our classification, 127 deaths being attributed to it, presumably the corrosions of lead, by absorption, or indirectly into the system—not by bullets! Arsenic scores 15 on the accidental or negligent side, and 6 on the side of suicide. Carbolic acid is coming to the front as a destructive, 33 deaths being attributed to accident and negligence, and 43 to suicide. Strange phase of human desperation, that so many should prefer painful to painless means! Chloroform numbers 46 as accidental, and 3 as intentional. Cyanide of potassium, 9 in the suicide column. Hydrochloric acid numbers 23, equally divided between the causes. Opium, morphine and laudanum continue to hold a preference, as

shown in the number, 95, careless or accidental, and 54 intentional or deliberate.

This statement is taken somewhat at random, from a list of drugs of the number of 50, which is, however, sufficient to admonish the apothecary that he is armed with many potencies—for good and beneficent purposes when properly made use of, but of fearful and fatal result in evil effect when misdirected and misused. Death by suicide is deplorable, since it indicates either that reason has left her throne, or that human sorrow and misery are burdens too great to be borne. Accidental or negligent poisoning is shocking and distressing. The custodians of poisons cannot be too careful in disposing or committing their use to ignorant or irresponsible hands. The determined suicide has a choice of means, and numerous alternatives—water, knife, pistol, poison—and he cannot well be circumvented, but the careless person should be so hedged about with safeguards and cautionary devices, that a fool and folly only can become responsible.

Anatomical Preservation.

William Keiller, professor of anatomy in the University of Texas in the course of an article in the *New York Medical Journal* on "The Teaching of Anatomy" gives the following hints on the preservation of bodies for anatomical purposes:

Glycerin, wood alcohol, and a small proportion (one or two drachms to each body, I think) of corrosive sublimate was then being used at Surgeons' Hall, Edinburgh, where I had been demonstrator. This gave fair but not quite satisfactory results. I used a quarter of a pound of corrosive sublimate dissolved in a gallon of wood alcohol, injected by a siphon apparatus into one common femoral artery at an elevation of about four feet, another gallon being used the following day if the body did not bleach throughout. The body was then wrapped in a sheet steeped in a strong corrosive-sublimate solution, and then in waterproof, and placed in a fairly close wooden tank. The result was an agreeable surprise. The method had the one fault that it whitened the bodies; but that I scarcely counted a fault. The muscles stood out in their natural prismatic form; the relations of vessels were beautifully preserved; but when the abdomen was opened the results were magnificent. The liver, instead of flopping out on the table when removed, remained firm and as perfect in form as one of Hie's plaster models; spleen, kidneys, adrenals, and pancreas maintained their proper outline. Pathological conditions and even abscess cavities were as recognizable and as readily investigated months after preservation as they would have been within twenty-four hours of death.

But what was effectual in a cold climate proved inefficient where an average winter temperature of 75 degrees and an atmosphere almost saturated with moisture combine to foster the growth of fungi. After various trials I have found the following method gives excellent results: The apparatus consists of a stoneware jar capable of containing four gallons, fitted with a wooden stopcock. It can be run up to the roof by a rope and pulley so as to give the desired pressure. Ten feet of rubber tubing is attached to the jar, a glass (or hard-rubber) stopcock at the lower end of the tubing (or a clamp), and another short length of tubing connecting this with a glass T tube.

* From: The Popular Science News.

In making this tube it is important that the two bulbous short arms of the T shall be as short as possible. It is evident that such a tube can be slipped into the artery through a slit, and then the vessel pulled up on both ends and tied. Thus the preservative is forced with equal pressure up and down the vessel. The selection of the artery is a matter of some importance, and after having tried the common femoral and the first part of the aorta, I find the right common carotid the best vessel where only two men are to be put to dissect the head and neck. In addition to the above apparatus, corks to fit the vertical end of the T-tube are necessary. The jar is filled with the following preservative:

Corrosive sublimate.....	3 viij
Chloride of zinc.....	3 xxviiij
Strong hydrochloric acid.....	3 ij
Water.....	3 cccix

Reflect the skin over the lower end of the right sterno-mastoid by a V-shaped incision, throw up the sterno-mastoid, and expose the common carotid and internal jugular. Make an incision in the carotid just large enough to admit the T-tube; tie it in; pass two ligatures under the internal jugular vein, but do not tie them; lay the body down on the floor and open the vein freely. Now, by raising the legs and trunk, empty the veins of all the blood that will run out of the jugular, if necessary passing a tube down into the heart to dislodge blood clot. Run the air out of your rubber tubing and connect with your T-tube. As the injection reaches the capillaries it will immediately turn the tissues to a pale gray, and this, with the swelling of the parts, will be the test of the thoroughness of your injection. Much more blood will at once be forced out by the jugular vein; let this run, occasionally increasing the intravenous pressure by putting your finger on the vein till the fluid runs clear and free from blood; then tie both ends of the vein and go on with the injection. It is better to have from eight to ten feet of pressure. If the feet do not bleed readily, raise the whole trunk so as to get as much pressure as possible on the extremities. The injection finished, remove the rubber tubing and put a well-fitting cork in the T-tube. The body may now be put into the tank for three days. On the fourth day inject the arteries with the colored injection, remove the T-tube, tying the vessel, and shave the body, if that has not been done at first. Now if the body is to be dissected at once it may be taken to the dissecting room the day following the colored injection; but if it is to be kept for some time the brain should be removed and placed in wood alcohol, the calvarium replaced, the scalp stitched up, and the body consigned to the tank.

PRESERVING FLUID FOR INJECTING INTO THE ARTERIES.

Corrosive sublimate.....	3 viij
Chloride of zinc.....	3 xxviiij
Strong hydrochloric acid.....	3 ij
Water.....	3 cccix

For one whole body.

A large porcelain mortar and pestle are used for dissolving this and for mixing the paint injection. Grind the corrosive sublimate to fine powder and dissolve with the aid of sufficient water and some of the acid; then dissolve the chloride of zinc with the rest of the water and acid, and mix both fluids together. The excess of acid is necessary to dissolve any carbonate of zinc that may have formed. Dry chloride of zinc is difficult to keep. It is good to weigh it out immediately on receiving it from the chemists into por-

tions of twenty-eight ounces each; add water and some acid and keep it in solution till required.

I have not had good results with arsenical fluids. The bodies have not kept so well with me, and I consider the hardening effect of the zinc and mercurial salts on the brain, liver and spleen, etc., of the utmost importance.

COLORING MASS FOR ARTERIES.

Turpentine varnish.....	3 xx
Turpentine.....	3 v
Boiled linseed oil.....	3 ijss
White lead (either in powder or ground up with oil as got in the paint stores).....	lbs. ij
Red lead.....	lb. ss
Lead acetate (sugar of lead).....	3 jss

Grind together in the mortar the lead acetate and red lead; mix this thoroughly with the white lead and then with the linseed oil and turpentine, adding each slowly and mixing vigorously. Having got this into a uniform paste, and having the syringe, nozzle, etc., all ready for injecting, add the turpentine varnish, mixing thoroughly and quickly; strain through a fine wire strainer, and inject at once. It sets very rapidly after the varnish is added. This usually makes an excellent injecting mass, and, though it makes a bad mess if a vessel ruptures during injection and does not always set well in the largest vessels, it is one of the best fluids for coarse injection I know of. The mortar must be wiped out with sawdust, and it and the syringe cleaned thoroughly with turpentine immediately after use. Of course this (like all other coloring masses) is thrown in with a brass syringe, considerable but steady and gradual pressure being used. The syringe is rather important. The old type of large anatomical syringe is a most clumsy instrument, recalling the age of the blunderbuss among firearms. My own syringe is extremely convenient and gives perfect satisfaction. Its barrel is eight inches long, two inches in diameter inside, as light as is consistent with strength, and holds fourteen ounces. The packing of the piston consists of tow, which is not so easily put out of order as a leather packing, and is easily renewed. There is a stopcock on the syringe, besides the movable one, which last should be ground to fit movable nozzles of various sizes (to suit radial, brachial, and carotid arteries, and one for the aorta), and should have a groove on it to tie a rubber tubing on if necessary. The graded nozzles should fit either on the syringe or on the movable stopcock. Where glass nozzles, as the T-tube, are used (I use nothing but glass nozzles, they are so easily made and do not corrode), they are to be connected to the stopcock by a short length of stout, unyielding rubber tube.

The old-fashioned plaster-of-Paris injection is still in use in some places. It is easily used and is clean; but the vessels so injected are rigid and apt to break. The secret of success is to use it thin and use it quickly. No coloring agent containing an aniline dye must be employed. They diffuse and stain the tissues all round. Red lead and vermilion (the latter only for very special purposes) are the only eligible reds.

In the winter months, in more northern latitudes, the following gelatin mass might be used. I employed it in Edinburgh for some time with great satisfaction, it is so clean and easily used, and demonstrates the vessels, from the largest to the smallest, so clearly. It does not set well, however, in latitude 33 degrees N., (or thereabout):

CHROMATE OF LEAD AND GELATIN MASS.

Take one volume of a solution of gelatin containing one part of gelatin to four of water.

One volume of cold saturated solution of bichromate of potassium.

One volume of cold saturated solution of neutral plumbic acetate.

Filter the warm gelatin solution through flannel (a wire strainer will do), and mix in bichromate solution. Then warm almost to boiling point, and add gradually the warmed sugar-of-lead solution. Inject as hot as the hand can bear. One body will take from forty to sixty ounces of this mass, thus requiring five ounces of gelatin. Prepare twenty ounces of each of the above solutions and mix as directed. The arteries, of course, are turned yellow, but it shows out very clearly.

TO PREPARE WATERPROOF SHEETING.

Finding the ordinary oiled cloth which I could purchase exceedingly liable to tear, I had a talk with a sailor one time when I crossed the Atlantic about how he prepared his oiled coat, and have my own sheets prepared now by the janitor. Wring the sheets out of strong brine (five pounds of common salt to a gallon of water). Dry as thoroughly as possible. Then immerse them in boiled linseed oil, and wring out the excess. Hang them up to dry in a good airy place, and keep them hanging up when not in use in some convenient place (the roof of the preparing room). Do not pile them up together or they may heat and even char. Each body is provided in the dissecting room with such a waterproof sheet, eight feet long by six feet broad, and each student must have his part wrapped in a suitable piece of calico similarly prepared. The sheets and small wrappers do several seasons.

FLUID FOR PRESERVING TANK.

Fill the tank with water to the desired depth; measure and calculate the number of cubic feet of water your tank contains, and to every cubic foot of water add three ounces of corrosive sublimate, four ounces of alum, and ninety ounces of common salt, the first and second in fine powder. Toward the middle of the session it may be necessary to add, say, a tenth of the whole quantity of corrosive sublimate.

One cubic foot of water is rather over six imperial gallons.

A jar of the same fluid, without the alum, should be kept in the dissecting room for students to dip the cloths in with which their parts are protected.

The Analysis of Ethereal Oils.

J. Klimont contributes an article to the *Chemiker Zeitung* in which he states that the most rational system for the examination of ethereal oils is that based on the determination of chemical constants depending on the composition of the oil. At present the observation of a few physical properties is commonly made to suffice for the discrimination of these substances. The determination of the acid value, the saponification equivalent, the methyl number and the carbonyl number constitutes an important step in this direction, and has now been supplemented by the determination of the terebenthene number, which depends on the fact, observed by the author, that direct quantitative addition of bromine is practicable with essential oils. The process has to be conducted differently from the usual method of determining the bromine absorption, which proved uncertain whether direct titration of the essential oil (in

chloroform) with bromine solution or the plan of adding excess and titrating back, was used.

REAGENTS

The reagents needed for the execution of the author's method are: (1) a solution of bromine in chloroform of about 1 per cent. strength; (2) an approximately pure terebenthene prepared after Ribau by washing commercial French oil of turpentine with soda, distilling and collecting the fraction passing over between 168 degrees and 170 degrees C.: the substance thus prepared can be kept for months in a well-stoppered bottle provided with a glass cap ground onto the neck; (3) chloroform, not necessarily pure, but identical in quality for any given set of experiments.

PREPARATION OF PURE TEREBENTHENE.

A pure product may, however, preferably be prepared by shaking with strong sulphuric acid, washing and distilling. The bromine solution is standardized by measuring out about 0.5 Cc. of terebenthene (and determining the exact quantity taken by weight) into a 20 Cc. flask provided with a stopper well ground in. The weighted portion of terebenthene is dissolved in chloroform, filled into a small burette, and used to titrate 10 Cc. of the bromine solution to be standardized. The titration is conducted by adding the terebenthene solution little by little and shaking repeatedly until the bromine solution is completely decolorized. The end-point is sufficiently definite. A corresponding titration with the ethereal oil (in chloroform) to be tested is then made in the same way.

THE TERMS OF BROMINE ABSORPTION.

As the substances capable of combining with bromine under the conditions of the experiment comprises bodies other than terpenes, the terebenthene number does not necessarily represent the percentage expresses the total bromine absorbed in of terebenthene in the oil examined, but terms of terebenthene.

The bromine needs standardizing afresh when more than a day has elapsed since its last standardizing. In order to make the determination of the terebenthene number useful as a means of judging the quality of an essential oil, the author has determined the terebenthene numbers of many samples, the results being given below.

TEREBENTHENE NUMBERS OF VARIOUS OILS OF TURPENTINE AND THEIR ADULTERANTS.

NATURE OF SAMPLE.	TEREBENTHENE NUMBER.
French oil of turpentine.....	99.9
American ".....	101
Austrian ".....	94.9-97.3
Russian ".....	70.5-82.5
Hungarian ".....	76.8
Russian " (deodorized).....	80.3-80.9
Rosin oils.....	52.1-67.6
Petroleum.....	1.5-1.6

Genuine oils of turpentine (French and American) are distinguished from their adulterants by their high terebenthene number.

TEREBENTHENE NUMBERS OF OTHER ETHER-EAL OILS.

NAME OF OIL.	TEREBENTHENE NUMBER.	COLOR AT END OF REACTION
Oil of anise.....	51.5	
Citronella oil.....	80.0-82.5	
Oil of lemon.....	117.7-120.2	
" cinnamon.....	82.5-83.8	
" cassia.....	21.1-40.9	cherry red
" rosemary.....	58.5-59.7	
Angelica oil (seed).....	78.4-79.6	
" (root).....	97.4	blue
Oil of peppermint (Japanese).....	96.2-97.8	
" (Mitcham).....	14.5-18.3	rose
" (red).....	9.8	
" caraway.....	90.8-107.7	
Oil, carvi.....	77.1-79.5	

Curly mint oil (Krauseminzol) 88.4-89.7	
Oil of fennel.....	44.9-58.8
" orange.....	119.0-121.1
" calamus.....	67.3
" bergamot.....	94.2
" cloves.....	45.1
" cajuput.....	84.9
Bajala oil.....	85.6
Sandal-wood oil.....	69.3
Oil of juniper.....	105.2
" cumin.....	80.7-24.9
" bitter almonds.....	0.6
" rue.....	10.1

ARIATION DUE TO OXIDATION.

The author, in commenting upon these figures, points out that the variations in the values obtained for different samples of oil of peppermint are to be ascribed to the state of oxidation (due to keeping) of each sample. The large differences observed in the case of oil of cassia are not readily explicable. At the end of the paper he insists on the necessity of working a process of this kind, arbitrary as it is, under conditions identical for all samples, and conducting the titration as rapidly as possible, so that any slow secondary absorption of bromine may not be reckoned as that characteristic of the oil under examination.—After the Analyst.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, it uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Collis Browne's Chlorodyne.—R. L.—We do not know of any formula that produces a closer imitation of the original than the one presented herewith. The National Formulary recipe is not intended for a close imitation of the Collis Browne article; it is rather considered an improvement over the original. Our formula is a modification of the formula devised by Peter Squire and published in his "Companion to the Pharmacopoeia."

Chloroform.....	4 OZS.
Ether.....	1 OZ.
Tincture of cannabis.....	1 OZ.
Tincture of capsicum.....	1 OZ.
Alcohol.....	8 OZS.
Treacle.....	8 OZS.
Extract of liquorice.....	2½ OZS.
Morphine hydrochlorate.....	8 grains
Oil of peppermint.....	20 minims
Prussic acid dilute.....	2 OZS.
Syrup.....	17½ OZS.

Dissolve the extract of liquorice in the syrup with a gentle heat, add the treacle, and cool; dissolve the morphine and the oil of peppermint in the mixed tinctures, to this add the chloroform and ether; mix this with the syrupy basis, shake well together, then add the prussic acid.

Chemical Barometer.—P. K. asks for information regarding the composition of the chemical barometers now so largely used as advertising mediums.

Dissolve 1 part of camphor in 4 parts of alcohol and to 12 fluid drams of the solution add:

Potassii nitrat.....	gr. xxxviii
Ammonii chlorid.....	gr. xxxviii
Aque.....	℥. 3ix

The best results are obtained by adding the solution of salts to the spirit of camphor contained in a long narrow bottle. The bottle is then corked and sealed with wax and after the lapse of an hour, a small aperture is made in the cork by inserting a red hot needle. The bottle is then hung up in an outside

exposure. Weather changes are foretold by the rise and fall of the camphor particles, which on the approach of a storm ascend to the surface. The approach of fair weather is indicated by the deposition of the particles on the bottom of the container.

Toothache Pills.—F. E. P. J.—The German recipe for odontalgic pills or toothache pellets is given below as follows:

Yellow wax..... 20 grains
is melted together with
Almond oil..... 10 minims
and

Powdered opium..... 15 grains
Powdered belladonna..... 15 grains
Powdered peltitory..... 15 grains
Oil of cajuput..... 3 drops
Oil of cloves..... 3 drops
added and the whole made into a mass and divided into 100 pills. One pill to be put into the hollow tooth.

Quinine Albuminate.—Dr. E.—This compound is more of a chemical curiosity than a well tried therapeutic agent. We find that it is produced by double decomposition between sodium albuminate and quinine sulphate; it is a white amorphous compound, of bitter taste and alkaline reaction, soluble in hot water and in alcohol. It is not decomposed by alkaline solutions, but the addition of sulphuric acid precipitates the albumen, which reaction does not occur with hydrochloric acid.

Wants a Universal Vehicle.—G. W. S. writes: "Will you please publish a formula for a universal vehicle in which to exhibit fluid extracts, tinctures, etc., resinous or otherwise, also salts, etc. Elegance, permanency, general utility of mixture and cheapness of ingredients and preserving agent are desired."

We do not think it possible to construct a single elixir capable of meeting all the requirements of our correspondent. The National Formulary should be consulted. That excellent manual gives formulas for the preparation of adjuvant and flavoring elixirs that are especially intended as vehicles for remedies of different composition and taste. Thus elixir adjuvant is a good cover for acrid or saline remedies, elixir of anise is a mild carminative elixir suitable for use where carminatives are indicated; and aromatic elixir will be found very useful as a general flavoring for simple remedies. Among other elixirs having special merit as vehicles for disguising the taste of nauseous medicines are, simple and aromatic elixir of liquorice, compound elixir of taraxacum and elixir of yerba santa. The last named is especially useful as a cover for quinine and other bitter remedies; and its value in this particular is increased by the admixture of about an equal part of compound elixir of taraxacum.

Witch Hazel in Bulk.—L. P.—The leading distillers of witch-hazel spirit or extract are E. E. Dickinson & Co., Essex County, The Connecticut Witch-hazel Company, Chester, Conn., and The New England Witch-hazel Company, Deep River, Conn. The price is regulated by the alcohol strength of the extract and the quantity taken. The following are ruling prices for barrel lots delivered in New York: 12 per cent. alcohol, 55c. per gallon; 10 per cent. 50c. per gallon; 15 per cent. 60c. per gallon.

Palmer's Lotion.—A. C. Olsen's "Secret Nostrums and Systems" quotes the Western Druggist as authority for the statement that this lotion is composed of a weak solution of zinc sulphocarbolate in glycerin and rose water.



Mr. Cobb of Chicago on the Contract Plan.

Editor AMERICAN DRUGGIST:

I beg to call your attention to the report of the N. W. D. A. meeting in your issue of Oct. 11th, page No. 268, and to advise you that the statement therein regarding my remarks is wrong, and is not in keeping with the facts, and as the report does an injustice to my firm and myself, I hereby request you to make proper corrections in your next issue.

I positively deny having made any such statement as you report, viz., "that my firm did not live up to the rules of the contract plan," or any statement that would lead anyone to think that either my firm or any other firm were violating the terms of the contract plan.

The matter under discussion at the time was that of the "10 per cent. or ¼ doz. clause." I stated that the Chicago jobbers had, by agreement, decided to waive this clause in the "city of Chicago," that the same was enforced outside the city where they come in competition with outside jobbers. I also stated that Morrisson, Plummer & Co., had always faithfully observed their agreements either written or verbal, and intended to do so in the future, but that if they should decide to depart from this position all would be properly advised of the fact, and that there would be no underhanded work about it.

You will readily see that your report creates a wrong impression of the character of Morrisson, Plummer & Co., in the minds of your readers and that nothing but a retraction in your paper with a plain statement of the facts in the case will do them justice. I feel satisfied that there was no wrong intention on your part, but that your stenographer, if you had one at the meeting, did not fully comprehend the importance of getting at the exact facts in the case and I, therefore, trust that you will give this matter immediate attention, and thereby undo the wrong which you have done.

THOS. A. COBB.

CHICAGO, Oct. 24, 1894.

We publish below in full the stenographic report of Mr. Cobb's remarks, together with a portion of the discussion which they elicited as showing the light in which his statements were understood by the members present. The discussion will also prove of interest in connection with the letter of Mr. Hopping in our last issue and with the rejoinder of Mr. Kline in another column.

While the discussion does not bear directly upon the case referred to by the latter it nevertheless shows the view of the ten per cent. clause taken by Mr. Kline.

Mr. Cobb—I want to make a few remarks that you may understand how we stand in Chicago in regard to this contract plan, and not have you carry away a false impression from the remarks made by certain parties who are not thoroughly posted in our past efforts in regard to the clause. As far as the country business goes we faithfully observe the ten per cent. clause and when we get ready to cut loose from it that fact will be made known. You can count upon our observing it. We do that. It is right that I should tell you the trouble we are meeting with. With regard to the city business, we jobbers have come together and found it is not practical to insist upon the enforcement of the ten per cent. clause. We are not violating your contract as near as the parties who sell the goods at cut prices. The firm I represent does not sell one dollar's worth of goods to any body that will cut prices. They turn down orders for hundreds of dollars' worth of goods that they have reason to believe will reach the hands of these parties. As there are no outside jobbers who sell to Chicago, and we know how our retailers feel in the matter during the last year, and the hard times, we have decided it is best to waive that ten per cent. clause throughout Chicago, but are willing to continue it through the country if it is the sense of the meeting that we should do so, but we have the right to argue the enforcement of the clause in Chicago.

Mr. Kline—Would you, for instance, notify the J. C. Ayer Company and Dr. Pierce that you were not keeping the contract?

Mr. Cobb—We would not.

Mr. Kline—Then it is an injustice on the part of Dr. Pierce to compel one party to sell at one price and another at another.

Mr. Cobb—I don't believe there is a jobber that sells the retail druggists in Chicago any goods. During these hard times these people have views on the subject, and we are bound to recognize them. It costs more to sell one bottle than it does a quarter or a half dozen, and it is right in our minds to make some charge for that extra expense we are put to.

Mr. Peters—By the fact that you go and ignore your contract, and outside jobbers keep theirs, and there is 10 per cent. difference between, how are they going to sell in Chicago? (Laughter.)

Mr. Powers—Mr. President, I am very much surprised at the turn this discussion has taken. Possibly I may have a more fortunate class of customers than some of my friends have. Coming from the South, I thought I had the most impecunious customers on the face of the globe, but yet I haven't had to add ten per cent. on the one-twelfth or the one-sixth of a dozen; they nearly all consent to take the quantity and thus secure the lowest

retail price. But, as the gentleman says he represents Chicago, they may have peculiar people there who can construe a contract so as to exclude Chicago; then, I say, we better do away with all our contracts, especially the ten per cent. contract. As Mr. Kline says, if we are beaten in one point, we are beaten in all. But any fair-minded retail druggist who should go to a jobber, if he wishes to buy a single bottle and wishes to have it sent to his place of business in the city, sometimes making two deliveries a day, and requiring an entry on the books, and all the time he requires to pay, we should have extra for that extra work and that bookkeeping. I do trust that this Association will rise and carry forward the good move of Mr. Eliel, and continue the advance on the little business we have to do.

Mr. Canning—I want to say that the retailers as an association have already adopted their quarter-dozen clause, whatever they do as individuals; we, as an organization, cheerfully concede it. (Applause.)

Dr. R. V. Pierce—I would like to ask Mr. Cobb if the Chicago wholesalers have informed the proprietors that they are not living up to their agreement.

Mr. Cobb—They have not.

Mr. Eliel—I am very much surprised, I must say, at this discussion. I don't comprehend it. It seems to me that I have seen some of these gentlemen at former meetings of the Association. (Laughter.) I may be mistaken. These may be all new men. (Laughter.) It seems so, but I am under the impression we have been over this ground before and these gentlemen were in favor of this clause. Now, I believe our records should be at once corrected. It seems to me that this Association, after the fullest discussion of the question, has put itself unanimously on record as in favor of this resolution. At my hotel they are charging me a dollar and a half a day—a perfectly outrageous price (laughter)—and I can't afford to stay here if we are going backward and forward and backward and forward over the old ground. If we are going to be on one side of the question one day and on the other side the next day, and on no side the third day, we won't accomplish anything. I don't understand why this should be brought up again, but I am glad to see it. I will say if I had not thought it my duty to get up and stop the unanimous adoption of that resolution without saying a word every one of you would have said "Aye." If you have any interest in these things why don't you discuss them, and then go home and enforce them, and not, like our Chicago friend, ignore it. I say it is a scandalous thing for any member of the Association who has signed the contract to come in and say: "Gentlemen, in our city we control everything and we don't carry this out." Mr. Kline is right. He thought it would weaken the contract plan. His judgment was better than mine, and I want to retract the remark I made, because he is entirely right and it is weakening the contract plan. I want to say, notwithstanding as much hard work as I have done for the ten per cent. clause, because I thought it was right and honest and fair and equitable, I am from now on eternally to oppose it unless it is made uniform and universally enforced. (Applause.) I want to say to our friends from New York who are not adhering to this, that it is because you have no backbone, and haven't confidence in each other. If you say: "We will do this and must do it," it is done.

The battle is your own. If there is any other section of the country where this clause has not been enforced, it is the duty of the jobbers in those sections to bring the matter before the chairman of the committee who has the matter in charge, and see if he can correct it. I want to say in some sections of the country where there was friction at first, a very little attention settled the matter, and they are adhering to this in all parts of the country with a few exceptions. Let us settle this matter here and now. Let us have this ten per cent. clause in every rebate contract. Let us all understand it. Let every man go home intending to enforce it literally, and let us all vote unanimously not to wipe out the action of the Association repeated and repeated again, and be done with it. We can't jeopardize the contract plan by any part of it which we do not enforce. We are told by engineers that a chain is only as strong as its weakest link, and if this link weakens this chain let us weed it out and have the chain strong in every part.

Mr. Hubbard—I would like to ask Mr. Cobb this question: After this discussion, and with the understanding that you absolutely control Chicago, is it your mind that you could go back and renew the contracts that have been given up for certain reasons; is there any reason why you cannot go home now after this discussion and begin over again, understanding that the Chicago druggists absolutely control the Chicago trade; can you not go back home and maintain this limit which we have been carrying out?

Mr. Cobb—I think the firm I represent are known to keep all their agreements, written or verbal, to the letter, and the matter of this ten per cent. clause is simply set aside in the limits of Chicago. We don't say that you people who desire it cannot come in and hustle for trade, but I say that we are entitled to that trade; fully considering the wishes of the retail people there we jobbers have come together and waived it in the city, and outside we are willing to live up to it, and if it is the sense of the meeting that it shall continue throughout the country we are in line. I believe I stated that before. If it is also to be understood that local jobbers, like in Chicago, have not the privilege of coming together on a point of this kind it better be understood now. As we understand it, we have that privilege, and there should not be any such remarks made as were made here by certain parties. We never worry the Association on the point of not carrying out our agreements. But have we the right to do that, or have we the right to present the matter to the manufacturers and waive that clause?

Dr. Pierce—Some of the remarks would have the tendency to mislead you to the belief that we have been notified. I want to state that the house that I represent has never been notified by that firm that they are violating this principle. (Applause.)

Mr. Cobb—I made provisions for just such parties as you.

Dr. Pierce—I understood that the parties generally have been notified. It seems to me that it is the members of your own organization that should be disciplined on the plan rather than the proprietors. (Applause.)

Mr. Sharp—Mr. Chairman, when this matter was brought up by that gentleman in Washington, I was one who strongly opposed it. I told him that he had no right to require the proprietors to go fur-

ther and exact terms from the retailers when they were complaining that the wholesalers had all the advantage. For seven years the proprietors of the house I represent stood out against this matter, but now by a unanimous vote of this body the proprietors were requested to put it in, and we modified our contract and put it in with the contract and it has been carried out. We have never received a notification from Chicago or any other point that this part of the contract was not being carried out there. I agree with Mr. Main, if you are going to use your own views in the matter as to certain localities you might just as well leave it out altogether. If it is wrong then let the convention here say that they would rather the contract would be so modified that there would be no extra charge, and it would be understood. Have it clear what you do want, and then let it be still clearer that you are going to enforce what you ask us to do. (Applause.)

Mr. Kelly—Mr. President, I am very glad to have heard this discussion with reference to this quarter-dozen clause. I have been earnestly in favor of it and have always carried it out, and I believe it can be carried out just as well as any other part of the contract, but I have always had this feeling, that there has existed in the minds of a number of jobbers of this country an idea that this provision was made at the earnest request of the wholesale trade, and that the manufacturers, while they would insist thoroughly in carrying out the old contract, said that they were rather indifferent as to whether the jobber himself would carry out the quarter-dozen clause. I think this discussion to-day has demonstrated to the proprietors who have adopted this quarter-dozen clause that the jobbing trade is really in earnest in this matter, and wish to have it carried out and made universal if possible. As to the case which came up as to our friend in Chicago, we all know this old house and have every confidence in its honor and integrity. I can say that I have known it many years and Mr. Cobb having stated that although this violation, as it may be called, has been made within the radius of the city of Chicago, that if it is the expression of this Association that hereafter it be carried out they will come at once into line, it seems to me that should end the controversy. With this exception I believe we are a unit on the question. I believe we are entitled to this additional profit, and there should be no difficulty in carrying it out if we have the nerve to say we intend to keep our contracts.

Mr. Kline Replies to Mr. Hopping.

Editor AMERICAN DRUGGIST:

Dear sir—In your issue of the 25th ult., Mr. Hopping makes a statement concerning myself, which I desire to correct.

He refers to the remarks made by Dr. Pierce at the last meeting of the "N. W. D. A." as charging the house with which I am connected with furnishing a cutter, to whom his terms did not permit us to sell them, with one of his (Dr. Pierce's) preparations, and states that I admitted the truth of the charge. The fact is that no charge was made because Dr. Pierce well knew the history of the transaction, which has been referred to by me at almost every annual meeting of the "N. W. D. A." held since this occurred. Possibly it may be well to again repeat what it was. Some years since at my suggestion purchases of Dr. Pierce's prepara-

tions were made from the principal prominent aggressive cutters in this city at that time, the preparations were sent on to Dr. Pierce to ascertain through what sources the supplies were obtained, and it was found that one of the bottles bore the mark upon a lot which had been shipped to us, and proved a sale which we had made to some one in perfectly good standing, and who was not prohibited by Dr. Pierce's terms, had turned the goods over to the party referred to. In other words, it did not prove any dishonesty of the jobbers, which is the only point Mr. Hopping is trying to make.

I simply desire to make this correction because some of your readers will doubtless draw an erroneous conclusion concerning the integrity of our concern, and their honesty in carrying out rebate contracts.

M. N. Kline.

PHILADELPHIA, Pa., November 3.

The New York City Board of Pharmacy

Editor AMERICAN DRUGGIST:

Referring to the note in your issue of October 25th, in reference to a coming article by Mr. Ferdinand Lascar, allow me to state that the Board of Pharmacy has during the past eight years accomplished some very excellent results in restricting the practice of pharmacy in this city to competent pharmacists. This work has been limited, however, by two things, (1) the limited amount of money at the command of the Board (a sum considerably less than \$1,500 annually); (2) by the laws under which the Board must act.

The Board employs for the purpose of enforcing these laws two agents, who keep the pharmacies throughout the city under inspection. The Board is exceedingly fortunate in having during the past two years secured the services of two men for this purpose who are honest, faithful and able. Prior to the employment of these two men it was, I regret to say, exceedingly unfortunate in the selection of its agents. The Board will be under obligation to any pharmacist who will criticize its work honestly, or who will aid them in accomplishing the results at which they are aiming.

So far as Mr. Lascar is concerned I think any criticism he might make against the work of the Board would be regarded with suspicion, for the reason that he had an unfortunate connection with a case which was under investigation by the agents of the Board, and became involved in a disagreeable entanglement resulting from the aforesaid connection. The Board fear that this trouble would tend to color with animus any criticism that he might make.

Cyrus Edson,

President of New York City Board of Pharmacy.
New York, October 27.

The paragraph referred to by Dr. Edson is the following, which appeared among the New York notes in our last issue:

Ferdinand Lascar, who is apothecary to the Demilt Dispensary of this city and is quite well known in pharmaceutical circles from his contributions to the drug press, is busy on an article concerning the operations of the City Board of Pharmacy. A good deal of dissatisfaction exists in the trade, it is claimed, on account of the number of drug stores which are at present owned and operated by doctors who possess no qualification from the Board of Pharmacy. The evil is felt most on the east side in the uptown districts. Mr. Lascar has a rod in pickle for these gentlemen and interesting revelations are promised in his article.

The Publication of Examination Questions Approved by the Regents of the University of New York.

Editor AMERICAN DRUGGIST:

You will see by reference to the volume of question papers and examination report sent herewith that the University of the State of New York thoroughly approves publication of the questions used at its various examinations. The demand for these tests is constantly increasing and this wide distribution encourages the criticisms and suggestions on which we so largely rely for improvement in the character and scope of our work.

Boards of examiners acting without co-operation of all interested in their work will almost invariably fall into ruts and thus necessarily magnify the abuses to which all examinations are liable.

If questions are properly formed on broad and fundamental topics rather than along narrow and special lines, they will, in our judgment encourage general culture. Take, for example, our questions for the year in any academic subject. We maintain that they suggest to the student an adequate preparation and that if he follows these suggestions he can not fail either to pass a subsequent examination or to gain a thorough training in the subject.

Enclosed you will find the blank we use for criticisms and suggestions. In this way we secure the co-operation of our college faculties, principals and teachers and our questions under this fire of criticism are less liable to violation of pedagogic principles than would be possible if they were made by a small number of men.

Would it not be a good plan to test this matter by the publication of a set of questions used by some board of pharmacy, sending copies to competent judges and asking for criticisms and suggestions?

James Russell Parsons, Jr.
Director of the Examination Department of the University of the State of New York.

ALBANY, NOV. 1, 1894.

A Card from the Low Art Tile Co.
Editor AMERICAN DRUGGIST:

Misrepresentations and falsehoods are very apt to prove a boomerang to those who resort to them for the furtherance of their own ends.

At the present time statements are being made throughout the country that the American Soda Fountain Trust has obtained possession of the Low Art Tile Company, of Chelsea, Mass., manufacturers of the Low Art Tile Soda Fountains. Will you kindly give us space to state that this statement has no basis of fact whatever, that the Low Art Tile Company is now as it always has been entirely independent. We are running our factory to its full capacity on full time and have done so since the first day we commenced business fourteen years ago. Our business, we are happy to state, is steadily increasing and to-day we have more orders for soda fountains on our books by 100 per cent. than ever before, in spite of any misrepresentations of our competitors. The Low Art Tile Co.

950 Broadway, Chelsea, Mass.

"Do you know," said the man who was going to have a tooth pulled, "I don't think 'dental parlor' is a good phrase?"

"No?"

"Drawing-room would be much better."—Washington Star.



Advertising in England.

The first thing which "struck" me on putting my American foot on English soil was the advertising. It did not dawn upon me gradually, but came with full force. Advertising was here and there and everywhere. The 'busses and "trams" were literally covered with every advertisement, it seemed to me, in the world. I felt my eyes getting as round as saucers, and was forced to conclude that whatever else the English might be slow in, they were not slow in advertising. Peering at one from window shutters and doors of private residences, were ads of famous proprietary medicines. On door stones and curb stones, whichever way you look, an ad of something confronts you.

LANDSCAPE ARTISTS

On the train from Liverpool to London we noticed that the beautiful landscape is dotted with advertising. Beecham's Pills nodded to you on this side from a little board, and bowed to you on the other side from a big board. Pears' Soap loomed up everywhere, and Vinola Soap followed with Mazawatee Tea, Hudson's Soap had a fair field, too, and the way the drugs and "The Pickwick, The Owl and the Waverly Pen, etc.," danced about was a caution. At the stations, which were not far apart, there was a continuous glare of advertising, and the Detroit Free Press ads gave me a very home-like feeling. Everything that can be used for advertising purposes in England is utilized. The backs of the 'bus or "tram" tickets, the latter of which are about an inch wide and two inches and a half long, give a good space on blue, green, red, yellow, purple and white background for advertising. Quoting some on tickets that now lie before me, a West Kensington 'bus line, white ticket, "Justice to Ireland with Beecham's Pills." A Hammersmith 'bus ticket, pink in color, has on its back, "A Ride to Khiva." "Captain Burnaby in the narrative of his famous 'Ride to Khiva' states that he took with him some quinine and COCKLES PILLS, the latter a most valuable medicine and some which I have used on the Natives of Central Asia with the greatest possible success."

ON THE BACKS OF TICKETS.

A green ticket of the Atlas 'bus line has on its back, "The future Mrs. 'Awkins takes Beecham's Pills." So on the back of every ticket one finds an ad of some kind. The English have a way of making the best of their advertising, and in many instances it smacks of egotism. For instance a small and rather inferior looking residence will be heralded as "This Noble Mansion To Let." A store room I saw, which was hardly high enough for one to stand up-

right in, had in large showy letters on its front, "These Commanding Premises To Let." I looked all about to see what the premises commanded, and sure enough across the narrow roadway was a large barren tract of ground, but a high board fence about ten feet completely obstructed the view, unless one got on top of the roof of the building.

Sitting on the stone coping which surrounds Hyde Park and leaning in various attitudes, I saw, one afternoon, about thirty men in uniform, every one of which had the name of a certain steamship line on his cap. A little further along I saw another lot of men, in different uniforms, bearing another steamship company's name on their hats. You see so many of one sort of ads that the thought presents itself at once, it is the repetition that attracts. I think I must have seen at least seventy-five or a hundred men all dressed in white bearing banners with the title of the play, "Shall We Forgive Her?" Now if I had seen but one man I certainly should have passed the show by. But before they were all out of sight, I began to think there must be something worth seeing in the show and I went.

Another novelty in advertising in and about London are the cries of the street hawkers. I was awakened one morning by a good baritone voice singing out, "Catch 'em alive, catch 'em alive. It kills your black beetles, and spiders and flies, the tormented things, catch 'em alive, catch 'em alive," and on inquiry learned the man was advertising a certain fly paper.

Every place one visits has guide books, and these books, like the English papers and magazines, are teeming with advertisements. I once bought a bouquet of beautiful flowers as I was crossing the Kew Bridge, near London, for which I paid the small sum of "tuppence," four cents of American money, and on examining the flowers closely, I saw one that appeared to be made of tissue paper, which proved to be the case, and on opening its petals I saw, as usual, an ad, "Whitely, the Universal Provider." The very next place I went to in London was this extensive business place, said to be the largest in the world, where everything may be found; as one man said, "We born and bury you."—Printers' Ink.

Advertising in France.

It is the custom in France to send out notices of the death of a member of a family. Frequently these notices are printed in the papers, and also duplicated in black-bordered cards and envelopes, dispatched to all the friends of the bereaved family. An enterprising chemist recently took advantage of this lugubrious custom, and one day the fashionable residents of

the city received the well-known large square envelope, bordered with deep black containing the regulation card engraved in the fashionable script, and carrying with it every appearance of affliction to a dear friend. At the same time, all the papers in Paris came out with the same card printed in their reading columns, and which ran as follows:

DE PROFUNDIS.

We have the sadness to announce to you the death of our beloved aunt.

She died in her 68th year, in the sacraments of her church, and she has made you her legatee.

Her last words were these:

"I require that my heirs shall use regularly wine of coca and pepto iron, three francs per bottle, to be had from X—, druggist."

This is a divine balm for those who are weak or who wish to restore youth to their old age.—*National Advertiser.*

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College Place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Questions; Sixth Series.

51.—Dotted ducts, also known as pitted or vasiform tissue, bothrenchyma, etc., are the largest and most conspicuous form of the vascular tissue or vessels. They are either continuous tubes or tubes interrupted by cross lines showing that they were made up of rows of cells placed end to end and that they have assumed the tube-like formation by obliteration of the intervening partitions. The walls of the dotted ducts are characterized by pitted markings made by irregularity of the deposit on the cell walls. They are of greater calibre than any other vessel found in the wood and form the pores visible to the naked eye in the oak, maple, etc.

52.—Scalariform differ from dotted or pitted ducts only in the form of the markings, the thin spots in the scalariform ducts being transverse and thus showing ladder-like markings, particularly where the ducts are prismatic in outline.

53.—The stomata or breathing spores are perforations of the epidermis of the leaf between two (rarely four) delicate and generally crescent shaped cells, which unlike the rest of the epidermis usually contains some chlorophyll and resemble the parenchyma underneath. When moistened these cells become a more pronounced crescent in shape and thus opening in the middle. So long as the leaf is in a moist atmosphere therefore the stomates remain open allowing free evaporation of moisture, but as soon as the plant becomes dry the stomates close, preventing further loss of moisture.

54.—Setæ are generally called bristles.

55.—Crude sap is the liquid imbibed by the roots and carried upward through the stem. It contains some air and gases in solution. In its upward passage it mingles with the soluble assimilated matters present in the cells. On reaching the leaves the inorganic matters in the crude sap is rendered assimilable under the influence of light, and the liquid charged with this assimilated or organized matter is known as elaborated sap.

56.—The ternary compounds present in the sap contain only three elements, carbon, hydrogen and oxygen. Quarternary nutritive matter contains the four elements, carbon, hydrogen, oxygen and nitrogen.

57.—Starch is the form in which nutritive matter is stored up by the plant for future use.

58.—Fixed oils belong to the class of ternary compounds.

59.—The principle vegetable acids with their main sources are, tartaric, from grapes, citric from lemons, and limes, and malic, from apples.

60.—Alkaloids are found principally in the bark and leaves.

Questions; Eighth Series.

THERAPEUTICS, PHARMACOLOGY, ETC.

81.—Give the name, dose and chemical formula of a mild saline cathartic.

82.—Give the name, Latin title and dose of a diuretic of animal origin.

83.—What therapeutic property is possessed by the potato bug?

84.—Name two indigenous oxytoxics.

85.—What are the principal mydriatic alkaloids and what are their general therapeutic qualities besides that of producing mydriasis?

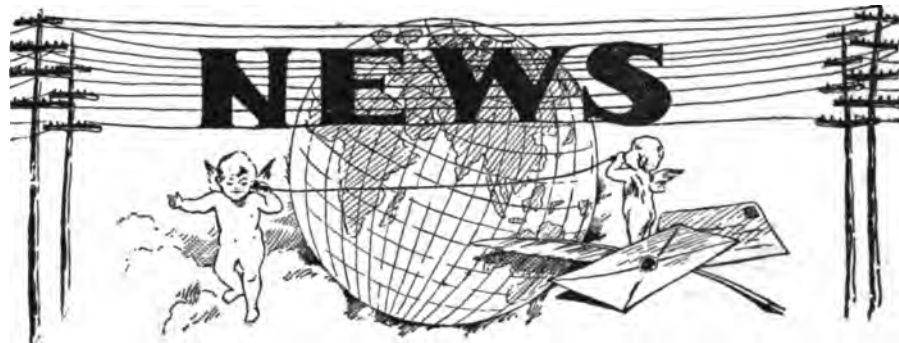
86.—Name the principal digestive ferments, giving their source.

87.—Give the name, dose and chemical constitution of a popular liquid diuretic and febrifuge.

88.—Name three powerful and prompt emetics.

89.—Name the principal antidotes to opium poisoning.

90.—What should be done in cases of phosphorus poisoning?



NEW YORK.

H. H. Wilcox, of West Winfield, N. Y., has been in town buying stock for the holidays. Mr. Wilcox has also placed orders with the Low Art Tile Co. for both a hot and cold soda fountain.

F. Haas has opened an elaborately appointed pharmacy at 38th street and Fifth avenue. Mr. Haas is the proprietor of a successful pharmacy at 266 Fourth avenue, corner of 21st street.

Wm. F. Krembs has opened a well-appointed pharmacy at 1125 Madison avenue, between 88th and 89th streets. He formerly conducted an establishment at 106th street and Madison avenue, and has had twenty-five years practical experience.

John P. Jones, druggist, of 758 Ninth avenue, has brought suit against the Broadway Cable Company for damages. He claims that his business was injured by the vexatious delays in the construction of the roadbed at Ninth avenue and 53d street, and by the obstructions placed in the street.

The drug store at 142 First street, Elizabeth, N. J., formerly owned and managed by W. H. Miller, has exchanged hands and is now owned and managed by Messrs. Lowe Bros., formerly of New York city and Orange, N. J. Messrs. Lowe Bros. are graduates of the N.Y.C.P. of the class of '92.

O. P. Sydenstricker, a prominent pharmacist of Lewisburg, W. Va., has been spending a few days in New York, making himself familiar with the course of the drug market, and looking up novelties for

the holiday season. Mr. Sydenstricker is known to many of our readers as the author of a very ably written article on the relation of Pharmacy Boards and pharmacists to the public which appeared in our issue of August 25.

Col. Chesebrough, head of the Chesebrough Manufacturing Co., manufacturers of vaseline and proprietors of the vaseline trade mark was one of the most interesting figures in the campaign, he being the candidate of the Republican party for Congress in the twelfth New York congressional district. Col. Chesebrough has conducted an active personal campaign which has attracted considerable attention from the local newspapers. It seems that many years since the doughty warrior wooed the muses and a small volume of poems was the result. These poems fell into the hands of a campaign orator who endeavored to read some of them to a portion of the colonel's constituency who are not only illiterate but who have a supreme contempt for poetry, romance and that sort of thing. The campaign orator, so the tale goes, was hauled from his cart and roughly handled, while the Colonel's prestige in that particular district sunk way below par. Another interesting incident of the campaign was a joint debate between Col. Chesebrough and a Mr. Green, one of the two opposing candidates, which attracted much attention. According to the "Herald" account of the debate among other things "Mr. Chesebrough told how the Canadian tariff built up the city of Montreal, made a passing reference to the twelve million bottles used in the vaseline business, and said he wasn't a speaker anyway." Out of this debate the Colonel came with flying colors—

William Speth of 1153 Broadway, corner Kosciusko street, Brooklyn, N. Y., has purchased the old time drug store at 1487 Broadway, which he will conduct as a branch of the Broadway and Kosciusko street store. Mr. Speth is well known in that neighborhood and has a good reputation and a very large trade which he intends building up despite very heavy competition and hard times. He is a wide-awake pharmacist and thoroughly alive to the interests of his many patrons. He intends running a model pharmacy in every sense of the word and we feel assured his endeavors will be crowned with success.

Among the New York city and vicinity druggists who have lately bought Low Art, Tile hot soda apparatus of J. A. Sangston 81 Church street, N. Y., are the following: Wm. Wilson, Broadway and Wall street, Ewen McIntyre & Son, Fifty-sixth street and Sixth avenue, H. A. Cassebeer, 257 Columbus avenue, Tomas & Co., Sixty-fifth street and Columbus avenue, G. D. Johnson, 2225 Eighth avenue, W. B. Tongue, 1402 Lexington avenue, Erich Fuchs, 1211 Livingston avenue, Peter Henekel, 580 Amsterdam avenue, L. Carl Trites, 670 Fulton street, Brooklyn, Crescent Drug Co., 639 Broad street, Newark, Rush Neer, 85 Hamilton avenue, Paterson, J. B. Sackett, Tarrytown, N. Y.

N. W. D. A. PROPRIETARY GOODS COMMITTEE.

President Thomas F. Main announces the following gentlemen as comprising the committee on proprietary goods of the National Wholesale Druggists' Association for the ensuing year:

M. N. Kline, chairman, Philadelphia, Pa.; George A. Kelly, Pittsburg, Pa.; Frank A. Faxon, Kansas City, Mo.; M. C. Peter, Louisville, Ky.; W. A. Robinson, Louisville, Ky.; Lucien B. Hall, Cleveland, Ohio; E. G. Wells, New York city; Charles C. Goodwin, Boston, Mass.; F. L. Carter, Boston, Mass.; J. C. Eliel, Minneapolis, Minn.; Theodore F. Meyer, St. Louis, Mo.; Thomas Lord, Chicago, Ill.; C. G. Lloyd, Cincinnati, Ohio; James E. Davis, Detroit, Mich.; E. A. Bigelow, Lowell, Mass.; Dr. V. Mott Pierce, Buffalo, N. Y.; C. C. Voorhies, Woodbury, N. J.; D. D. Phillips, Nashville, Tenn.; J. W. Phillips, New Orleans, La.; C. F. Weller, Omaha, Neb.; H. Michaels, San Francisco, Cal.

Society of Chemical Industry.

INAUGURAL MEETING OF THE NEW YORK SECTION.

The newly formed New York section of the Society of Chemical Industry met for the first time on Monday evening, November 5th, in the hall of the New York College of Pharmacy, 115 West 68th street, when Alfred Henry Mason, of Seabury & Johnson, read his inaugural address as chairman of the Section.

After a brief reference to his election to the chairmanship of the Section he sketched in outline the history of the parent society and gave the standing membership as 2,828, which he said consisted of names eminent in the scientific world, as well as practical manufacturers connected with the most widely differing departments of chemical industry. In speaking of the newly-formed Section he made mention of the fact that the number of F. C. I.'s in the United States amounted to 300. "The formation of this Section," he said, "creates a new phase in the history of the society, and we are heartily welcomed by the council."

According to Mr. Mason, one fifth of the members of the Society reside out of Great Britain, 128 in Europe, 108 in British Colonies and 21 in Japan. He reminded the

members, and wished it placed on record, that for the conception of the New York Section they are indebted chiefly to Arthur MacGeorge, of the Cheesbrough Manufacturing Company, who with the able and influential assistance of James Hartford, of Schoellkopf, Hartford & MacLagan, Limited, and of the Honorary Treasurer, R. C. Woodcock, of the American and Continental Sanitas Company, brought matters to a successful issue. Acknowledgment was also made of the valuable co-operation of Dr. W. Schweitzer as Honorary Secretary.

PHARMACEUTICAL PROGRESS DEPENDENT UPON CHEMISTRY.

Mr. Mason's address, though lengthy, was extremely interesting, and, as he proceeded to the discussion of chemistry in its relation to pharmacy and to position of the chemical industries of the United States, he compelled the closest attention, and the address was received with marked favor. "Pharmaceutical progress," he said, "is chiefly to be won by the assistance of chemistry." . . . "The pharmacologist wants to know from the chemist the construction as well as the composition of the larger molecules composing the active principles of plants, and until the chemist can tell him the exact manner in which such large molecules, e.g., morphine and strychnine, are built up, and the pharmacologist has obtained a wider knowledge of the smaller molecules under varying conditions, he cannot understand the effects of the modification which can be produced in these large molecules. At present he does not comprehend why the substitution of a molecule of methyl for one of hydrogen in morphine weakens its sleep-producing and pain-quelling power, while the subtraction of a molecule takes both away, and converts it into a powerful emetic. It is to the chemist he looks to obtain this knowledge, and with such assistance new remedies may be constructed, more useful than those we have."

AMERICAN PHARMACISTS.

Speaking of the position which the United States occupies among the manufacturing chemists of the world he called attention to the fact that "America was the first country to introduce what is known as 'elegant pharmacy' and has been the inventor and pioneer of many devices by which life is made more pleasant and nauseous medicines even tempting."

"No manufacturers have done more to bring about this condition of things," he went on to say, "than Parke, Davis & Company of Detroit and New York. So enterprising is this firm that connected with laboratories is a scientific department of experts in the various branches of the science of pharmacology, the members of which are devoting a lifetime to the careful study of the physical, chemical and therapeutic properties of drugs. In this way men of science in different parts of the world are interested in the investigation of the new therapeutic agents and assist in the investigation, and thus numerous drugs of value have been discovered and introduced by them. Many investigations have been made by others and manufacturers of repute such as Sharp & Dohme of Baltimore provide the extracted principles of plants, etc., of high quality. Another American industry is the manufacture of eclectic remedies, resinoids, etc., and Messrs Lloyd Bros. of Cincinnati stand pre-eminent for their discoveries and manufactures in this direction."

AMERICAN CHEMISTS.

"But maybe beyond this is the eminence rightly attained by manufacturers of high class chemicals and alkaloids in this country."

Such names as Squibb, manufacturing 450 different chemicals, Powers & Weightman, Rosengarten & Sons, Pfizer & Company, Mallinckrodt Chemical Works, manufacturing 800 different chemicals and others, will readily occur to those present."

DIGESTIVE FERMENTS.

Mr. Mason had a good word to say for the manufacturers of pepsin and related substances and concluded that it would be taken for granted that the study of digestive ferments is one of great importance in America, which is a nation noted for dyspeptics. He said in part: "In the manufacture of pepsin, America takes the lead. There are several manufacturers but the developments of the laboratories of Messrs. Fairchild Bros. & Foster of New York, have done much to add to the reputation of this industry."

POROUS PLASTERS.

The history of the invention of the rubber porous plaster was fully told. The inventor of the process of incorporating India rubber with inoffensive gums in a plaster mass was according to Mr. Mason, a Colonel Shecut, of the United States army. In 1876 George J. Seabury conceived the idea of incorporating standardized medications with rubber combination such as belladonna, opium, aconite, etc., and perfected an industry purely American. The annual output of porous plasters he computed at not less than 20,000,000, in addition to large quantities of spread plasters distributed in rolls. He said that in one factory alone 60,000 pounds of belladonna root yielding 13,000 pounds of alcoholic extract was employed for this purpose in one year.

THE CIVILIZATION OF A COUNTRY DEPENDENT UPON CHEMICALS.

Coming to chemistry proper he made reference to the exhibits of chemicals at the Columbian Exposition at Chicago and further on quoted Lord Beaconsfield, who in a financial speech in the British House of Commons previous to his election to the Peerage once said that the business of the country was prosperous because "chemicals were good," in good demand at high prices, indicating that he looked upon chemical industries as a factor in the nation's welfare.

At this point in his address comparative statistics, compiled from the respective reports of the tenth and eleventh censuses, were presented. The total value of the products of 84 American chemical establishments was stated in the tenth census at \$117,877,324.

Some of these the speaker said were produced by only a few establishments and in limited quantities, the greater portion consumed in the United States being imported; for instance only one factory mined and produced sulphur, yielding 1,200,000 pounds while 176,288,000 pounds were imported; three establishments produced 80,518 pounds of aniline colors while 176,288,000 pounds were imported; one establishment produced 40,259,988 pounds of soda salts while 860,801,809 pounds were imported and six establishments produced 89,317,725 pounds of alum, of which 2,112,570 pounds were imported.

The eleventh census he said puts the total value of all products manufactured during the census year ending May 31st, 1891, at \$187,007,976.

THE PRODUCTION OF GLYCERIN.

That portion of the chairman's address relating to the output of glycerin in the United States is of special interest to pharmacists. He said: "In 1848 the output of

glycerin manufactured in America was 15 pounds, this was manufactured by Shoemaker of Philadelphia from lead plaster. In 1860 the output had gone up to 150 pounds. In 1865 the value of nitro-glycerin as a blasting agent became recognized, and in 1867 it was largely employed in the manufacture of dynamite. The glycerin used for this purpose is obtained from the candle factories and soap lyes, and the estimated quantity thus obtained is 8,000,000 pounds per annum.

"The demand for refined glycerin, however, increased so fast, that in 1874, there was not sufficient to meet the demand, so that supplies of crude material suitable for refining had to be imported from Europe, and in that year, 576,574 pounds of crude glycerin was imported, and the demand has increased so rapidly, that in 1898, 16,440,218 pounds was imported, all used in the manufacture of refined glycerin. The W. J. M. Gordon Chemical Company, Cincinnati, Ohio, are the largest refiners of glycerin in this country; chemically pure, also for nitro, and all purposes for which it is used. The Proctor & Gamble Company, Cincinnati; the M. Werk Company, Cincinnati; the Grasselli Chemical Company, Cincinnati; Marx & Rowelle, New York and W. & H. Walker, Pittsburg, are the principal manufacturers."

Before adjourning Mr. Mason was, on motion of Dr. E. G. Love, tendered the thanks of the Section for the excellent paper read. The paper, of which the foregoing is an extract made up from notes taken during its reading, is reserved for publication in the journal of the society.

On motion of Dr. Schweitzer the chair was empowered to appoint a committee of three to study the taxation of alcohol in foreign countries, the committee so appointed to have power to confer with other bodies on the subject, should such action be necessary.

The next meeting of the Section will be held at the College of Pharmacy on the first Monday in December. The local Secretary is H. Schweitzer, Ph. D., 159 Front street.

Among those present at the meeting were: M. Alsberg, G. F. Bruckmann, T. Lynton Briggs, H. Comer, James Hartford, E. G. Love, F. J. Schleicher, Arthur McGeorge, J. Lawson Will, Dan. Jesurun, Virgil Coblenz, Francis P. Smith, H. C. Van Denburgh.

MASSACHUSETTS.

BOSTON, November 5.—President Canning in his address at the recent meeting of the Apothecaries' Guild, stated that it was his belief that the Interstate League had now attained sufficient strength for some far seeing proprietor to adopt the plan. He did not have to wait long for a verification of his prediction, the time consumed in printing and issuing of the letter to proprietors, adopted at this meeting, being the only interval necessary. The first concern to adopt the plan is that of Seth W. Fowle & Sons, 81 High street, this city, and in their letter to President Canning they state their belief in the idea and say they will put it into immediate operation. This house approves of the plan with something more than words of commendation, their belief being based on other than a sentimental basis, namely, money, as shown by their contribution of a check of \$100 to assist in carrying out the objects of the League.

A DRUGGIST MAY KEEP LIQUOR FOR MIXING WITH OTHER INGREDIENTS.

The full bench of the supreme court has over-ruled the exceptions of Henry F.

Boutwell, a Fitchburg druggist, who was convicted in the superior court of unlawfully keeping intoxicating liquor for sale. His claim at the trial was that he used them exclusively for the purpose of mixing them with other ingredients as medicine. The judge at the trial instructed the jury that, if he kept them for such a purpose, he was not guilty of the offense charged, but it was for them to determine on the evidence whether he did so have them or for the purpose of sale. Boutwell asked for a ruling that, if the jury found that the liquors were a part of his stock of the preceding year when he had a license, and they remained over, with no intent to sell, there was no violation of the law. This request was refused by the presiding judge, and the full court upholds the refusal, as it says that the refused instruction was on an hypothesis of fact of which there was no direct evidence, but only a possibility of an inference.

MR. WHITNEY'S APPOINTMENT CONFIRMED.

Chairman Whitney of the pharmacy board has been confirmed by the Governor's council. The opposition to this gentleman was engineered by his personal enemies, disbelievers in pharmacy laws and the board which controls them, aided by the disgruntled ones—those who had been interfered with in their law-breaking schemes. For Mr. Whitney's opponent, however, nothing but the kindest words are heard. The chairman's associates showed their loyalty to him when it was feared that he would not be reappointed, by each going to the Governor and requesting, if it was absolutely necessary to make room for a newcomer, to spare Mr. Whitney and accept the resignation of his visitor.

A COCAINE FIEND PUNISHED.

Frederick Osbert or "Olert" has at last been sentenced to six months in the Middlesex house of correction. He is the "cocaine fiend" whose doings were chronicled in this column last summer, and who was arrested at the instance of Druggist Sargent of Malden, upon whom he endeavored to pass a forged order for two drachms, each of cocaine and morphine. This was his favorite method of obtaining these drugs, but he never attempted to imitate the signature of the persons whose names he forged. Osbert's experience with the drug has been most horrible. He began with small doses and then it conquered him with a firm grip. His money went and his credit went. His case has attracted considerable attention. He first injected morphine into his system about five years ago as a stimulant, and finally substituted cocaine for the morphine. No one who knew him would ever sell him cocaine, and the poor fiend had to resort to the trick of making his own prescriptions for the deadly drugs. On his body are about 100 wounds caused by injections.

JOTTINGS BY THE WAY.

W. W. Pitcher, Pittsfield, has ordered a fountain from the Low Art Tile Co.

F. W. Putney, retail drugs, Broadway, East Somerville, has been attached.

Charles W. Larrabee, druggist, 476 Blue Hill avenue, owes \$1600 and has assets of \$115.

Whittendon Drug Co. is the name of the concern which is to open a new store at Taunton.

John G. Benedict, Ph.G., and Frank E. Fitz are assignees for George T. Sears, 136 Hanover street.

D. Q. Perry formerly of 625 Shawmut

avenue, has been refused a discharge by the Insolvency Court.

Fox & Co., Bangor, Me., are to equip the new store which they intend to open with a fountain from Tufts' manufactory.

A. Giesmann, Holyoke, is to have a new store, for which he has secured a "Mikado" onyx fountain from James W. Tufts.

V. L. Raia, John A. O'Keefe, E. A. Aldrich & Co., and F. W. Thrift, all of Providence, R. I., are recent purchasers of Tufts' fountains.

Scates & Co. of Portland street have ordered very elaborate hot and cold fountains from the Low Art Tile Co. A new feature is seen in the counter which they have adopted which is to have a tile front.

Edmund P. Smith, for many years head clerk in the drug store of H. Boynton & Co., Biddeford, Me., died October 22, aged 89. He was a prominent member of the Odd Fellows, Patriarchs Militant and Knights of Pythias. He leaves a widow.

The Apothecaries' Hall Co., of Waterbury, Conn., is one of the largest retailing establishments in the State. At the present time the concern is engaged in erecting a six-story granite building for the accommodation of its business. One of the features of the new store is to be an elaborate fountain already ordered from the Low Art Tile Co., of this city.

Judge Aldrich of the superior court has ordered a decree for the plaintiff in the suit brought by Frances C. Martin, executrix, vs. Dr. Everett M. Bowler of Brookline, in which the plaintiff asked for an injunction to restrain the defendant from using the name of her husband, the late Dr. Henry A. Martin, in the manufacture and sale of vaccine virus.

The Low Art Tile Company has had a large demand for hot soda fountains and here are some of their recent Massachusetts customers: J. E. Royce, Brockton; Patno & Co., Boston; R. J. Wills, Somerville; A. H. Burgess Fitchburg; A. L. Ritchie and A. H. Mitchell & Co., both of Haverhill. Purchasers from other states are: C. P. Herrick, Tilton, N. H.; A. Marwick & Co., Hartford, Conn.; A. C. O'Brien, Ansonia, Conn.; F. J. Parks, Bath, Me.; C. B. Dowling, Toledo, Ohio; C. R. Swettland, Cleveland, Ohio; J. B. Sackett, Tarrytown, N. Y.; William Wilson, Broadway and Wall streets; W. B. Lougue, 1411 Lexington avenue; G. D. Johnson, 2228 Eighth avenue; and H. A. Cassebeer, 257 Columbus avenue, all of New York City; W. C. Pfau, Jeffersonville, Ind.; J. D. Coblenz, Washington, D. C.; Rush Neu, Paterson, N. J.; H. M. O'Neill, Newark, N. J., and Beech & Parmalee, Owego, N. Y.

The first monthly meeting of the Boston Drug Association was held at Young's Hotel, Oct. 30. The evening was devoted to "Reminiscences of Recently Deceased ex-Presidents." The guests present were: Dr. Wm. Ingalls, who wrote one of the first prescriptions dispensed by Mr. Metcalf at 39 Tremont street; Walter Brackett, artist, whose acquaintanceship with Mr. Metcalf dates back 50 years; John Larabee, of the board of pharmacy; C. B. R. Hazeltine and T. J. Delano, Jr. Papers were read by President Babcock, Frank A. Davidson, Ph. G., and Dr. Ingalls, all of which are to be spread upon the records of the society. Other speakers were: Thomas Doliber, Ph. G., T. I. Delano, Jr., Amos R. Tilden, Henry Canning, Walter Brackett, and Henry M. Whitney. Mr. Cobb suggested that an album be purchased for the purpose of holding the portraits of ex-presidents, an idea that was at once adopted. The next meeting will be held at Young's on the last Tuesday of the present month.

SEVERE PENALTY FOR ILLEGAL LIQUOR SELLING.

Bernard S. Devlin of Cambridge and Windsor streets, Cambridge, was before the district court recently charged with violating the liquor law. In passing sentence Judge McDaniel said: "Upon this complaint * * * I am satisfied that the defendant is guilty. He is the proprietor of a drug store, and under cover of that business has violated the law in respect to intoxicating liquors. That kind of a drug store cannot be maintained within the jurisdiction of this court. * * * The defendant has been previously convicted of a similar offence, and that fact must be taken into account in the sentence." Devlin was sentenced to pay a fine of \$150, and to serve two months in the house of correction at East Cambridge.

CONNECTICUT.

NEW HAVEN, November 5.—Business with the druggists remains rather quiet, and the opinions of the retailers continue to differ somewhat as to the present condition of trade and its future prospects.

LOCAL OPTION AND SHAM DRUG STORES.

Now that the no-license law has gone into effect in several small towns we shall hear of drug stores starting. This is one of the most effective ways of evading the liquor laws. It is done in this manner: A former liquor dealer rents a store and fits it up as a pharmacy, engages a drug clerk and opens for business. He then makes a deal with some young physician to supply prescriptions calling for liquor to all his friends and customers at a nominal sum. These prescriptions, to be prepared, will cost about 10 cents, or about the same price that a good drink would cost in a saloon. The patient (?) probably has a cold (which stays with him right along), and he has the prescription made up every day. After it is once filled and numbered, the "patient" calls out something like this when he goes in the "drug store": "431 Cd.; good measure, please." Of course, any legitimate drug business that comes along they supply the demand. All of which is a source of great annoyance and chagrin to the genuine druggists of the State, as tending to lower the calling in general in the eyes of the public to the level of these rum-sellers.

Conversely to the above is the probable closing of several drug stores in New Britain where they have had no license for the past year, but when, after election, the saloons can again do a legal business.

The merchants of Ansonia met recently for the purpose of trying to prevent the practice which has become general with the local merchants—that of offering inducements to customers in the way of gifts with every purchase. They are of the opinion that this practice should be discontinued, and should any inducement be offered it was only right and proper that it should be the reduction of the price on an article. The druggists are much interested in this scheme as they are troubled with people inquiring what the prize or premium is if they purchase a certain amount of goods. It is the enterprising druggist who offers to the person who has bought, we will say, five dollar's worth of something he sells, candy, patented medicines, prescriptions, cigars, etc., a large bath sponge or a "beautiful" (?) bath brush.

NEWS NOTES.

Mr. Pickett, formerly of Stevens' drug store, in Danbury, is now with Hamilton, of Bridgeport.

E. E. Fisher of Bridgeport, is preparing for a lively holiday trade as he finds business rapidly improving.

Charles S. Starr, the druggist of New London is an acute politician and was in the race for representative to the assembly from his city.

R. S. Woodruff, formerly owner of the store occupied by Cannon & Webster, in Waterbury, has charge of Partrie's drug store, in Brooklyn, a suburb of Waterbury.

The drug clerks at South Norwalk are athletically inclined, and W. H. Mills, clerk for druggist H. R. Hale of that city, proposes to start a fencing class in the Y. M. C. A. Hall this winter to fill the want.

A new drug store is to be opened in Shelton in the building formerly occupied by Mr. Kennedy, the saloon keeper (?), who has closed his place because of the enforcement of the no-license law, which went into effect November 1.

Stephen Billings and John Clappitt, both of whom have been connected with the pharmacy of L. W. Booth & Co. in Bridgeport for several years, have purchased the drug store known as the City Pharmacy, at 36 Wall street, of the same city, and formerly managed by Joseph Lutz.

Frank Maguire, manager of Kilbride's Bank street pharmacy, in Waterbury, and Miss Margaret O'Connor, were married on Wednesday, Oct. 28. Many handsome presents were received. A reception was held at the residence of Representative John L. Saxe. Mr. and Mrs. McGuire are enjoying a wedding tour to New York and Jersey.

William A. Fuller, the popular drug clerk of New Haven, died at Southern Pines, N. C., Friday, October 26. He went there for his health. He had an attack of typhoid fever, which was followed by an attack of pneumonia. Prior to his illness he was a drug clerk at Leighton's Pharmacy on West Chapel street, and subsequently for Alderman Lowe on South and Park streets. He was preparing to enter the College of Pharmacy in New York when his health failed.

Since Dr. Thompson of Fair Haven passed away there has been a rush of young doctors locating there in hopes of getting a share of his practice which, it is currently reported used to amount from \$10,000 to \$15,000 per annum. Having a practice of this magnitude divided among several physicians makes the prescription business more equally divided among the druggists as each druggist has his friends who advise their patients to have the prescriptions prepared at such a store (his friend's) because they know their business, etc.

The latest comer in Fair Haven is Dr. A. L. Boyer, formerly of Ansonia who has taken the office that was occupied by Dr. Thompson.

The *Yale Medical Journal* made its initial appearance on Tuesday, Oct. 28. The paper will be issued monthly during the college year by members of the Medical school under the direction of an advisory board consisting of Drs. W. H. Carmalt, O. T. Osborne, and Herbert E. Smith of this city. George R. Shepard of Hartford and Nathaniel E. Warden of Bridgeport. The board of editors for the year is made up as follows William J. Sheehan Jr., Charles J. Bartlett, Charles W. Child and Henry W. Underhill. They will be assisted in their labors by contributions from the pens of many of the leading physicians of the State. The first issue contains interesting articles by Drs. W. H. Hawkes, W. H. Carmalt, H. P. Stearns and H. C. Smith.

MAINE.

Fred. Kerr, the genial manager for L. Kilburn & Co., Presque Isle, has just returned from a three weeks' vacation, very much refreshed.

W. S. Perks of Houlton expects to move into his new store next month, which is now nearly completed. He was in New York and Boston, making purchases, last week.

The City Drug Store have just purchased a Tufts hot soda fountain of a very pretty design. Mr. Felch, the genial manager, intends to dispense the finest hot soda in Bangor out of the new fountain.

Oscar F. French of Houlton is building a new store on the corner of Court and Main streets, which he hopes to have ready for occupation early next year, his business at present being continued on Court street.

A serious accident happened recently to Joe Houlihan, the clerk in the City Drug Store, Bangor. While standing on a step-ladder, reaching a box of cigars from a shelf, the ladder gave way, and he fell, breaking three of his ribs and bruising himself badly.

The Vermont Pharmaceutical Association.

The Vermont Pharmaceutical Association met at Montpelier on Wednesday and Thursday, October 31st, and November 1st, with sixty members in attendance.

The principal object of the meeting was the formulating of a pharmacy law for introduction and passage during the present session of the legislature. Having the experience of twenty years with the legislators, the most extreme caution was taken in drawing up the bill, which will take effect from its passage. It provides for a board of pharmacy of five members, who shall issue licenses to all now in business, without examination, simply upon application. But should anyone not in business before the passage of the bill make application, he or she must undergo examination and shall not receive a license unless qualified.

It is simply an entering wedge, and amendments may be made in the future as the people see the benefit derived from the law. Those now in business will be allowed from the passage of the bill until next April to register, and should they not do so before that time, it will be unlawful for them to practice pharmacy, and an examination will be necessary before they can continue business.

The Board is to be appointed by the Governor, and will proceed in their organization as is the custom with other State Boards.

A. W. Higgins, of Rutland, president of the association, says, "I never saw men more earnest and interested than were the druggists at this meeting." The various committees were appointed for the year, and the association adjourned, to meet at Montpelier next August at the call of the president. The Montpelier druggists were very hospitable, and treated the association to a ride to Barre and through the granite quarries.

Regard it as a Law.

At a meeting of the Druggists' Association it was agreed to close the stores during the week excepting on Saturdays, at 9:30. The law went into effect last night and all observed it, though some unwillingly. It is thought now that the law will be repealed at a meeting to be called in the near future.—Elwood (Ind.) Press.

PENNSYLVANIA.

PHILADELPHIA, November 6.—The action of the class of '97 of the Jefferson Medical College in passing resolutions to use nothing but the metric system in their professional duties, is considered a step in the right direction by the younger element in the drug business. To those who have been practicing for a number of years any innovation is frowned upon, but when it is taken into consideration that the doctors as a rule are not masters of the art of good writing, it is thought that any system that will lessen the likelihood of mistakes in the reading of the prescriptions is a move in the right direction. This is the first medical class that has taken the matter up and it is a surprising thing that some change in our system has not been made before. The United States Pharmacopoeia for 1890, recommends the metric system, and it is almost universally practiced in the colleges of pharmacy in the United States. Nearly all Europe uses this system, and the United States, the most progressive country in the world, still adheres to its old styles of mixing drugs. Professor Remington of the Philadelphia College of Pharmacy when informed of the action the medical class had taken said:—

PROF. REMINGTON ON THE METRIC SYSTEM.

"This move on the part of the students indicates a healthy, progressive feeling towards greater uniformity and accuracy in the filling of prescriptions. It brings us into line with the great nations of the world, who have for years used this system exclusively. The United States is the only great nation that is using the ancient and rejected standards, Great Britain having thrown overboard these standards as long ago as 1826, when they adopted their Imperial system of measures.

"This action at such an important seat of medical learning as Jefferson College augurs well for the adoption of the metric system by the coming physician. While it is true that the pharmacist may make his preparations by the metric system and the doctor still continue to use the cabalistic characters, the future is promising that it will lead to fewer mistakes in deciphering prescriptions and will bring the prescribing of medicines into direct line with their method of preparation.

"It may not be generally known that the metric system is the only system of weight and measure legalized in the United States. The act was passed in 1866.

"It is to be hoped that when the metric system is generally adopted liquids will not be weighed as is the custom in some continental countries, but that the principle adopted by the United States Pharmacopoeia will be extended to prescription writing, and solids will be weighed and liquids measured, using the gramme for solids and the cubic centimetre for liquids. It will be a cause of congratulation when our other great medical schools follow the example of Jefferson College."

A PAINT FIRM ROBBED.

H. S. Parkman, a clerk in the office of John Lucas & Co., the paint manufacturers, on Race street, below Fourth, has disappeared, and with him \$1200 is also missing. The robbery occurred on October 26, and was discovered about one o'clock, at the same time Parkman was found missing. The story of the robbery as reported by the firm is that

the cashier was busily engaged in counting over several thousand dollars in preparing the money to be used in paying the wages of the employees at the firm's works in New Jersey. The money was put up in packages and bags, and it was one of these parcels that was missed. Parkman, the young man suspected, was employed in the cashier's office and it is supposed he took the package of notes while the cashier had left the desk for a moment. After the theft was discovered the firm placed the matter in the hands of the police, who captured Parkman in Washington, D. C., and on October 31 brought him to Philadelphia, where he was arraigned and held in \$1,000 bail for trial. Detective McKenty said Parkman had told him that he had deposited \$1,000 in a bank in this city—the balance with the exception of a few dollars having been lost on the races.

PREPARATIONS FOR HOLIDAY TRADE.

Many of the drug houses in this city are getting ready for their holiday business. The wholesale houses are receiving more orders now than they have had for some time. It is notable that those who have business with the South are handling more goods than those who merely cover a Northern territory. From all indications the South is enjoying more prosperity than their Northern brethren. The orders from this section are up to the usual standard and all the salesmen who are below Mason and Dixon's line are sending in favorable reports.

H. T. HELMBOLD DEAD.

Henry T. Helmbold, who made a large fortune in patent medicines, and whose reckless expenditures finally caused his incarceration in an insane asylum near Norristown, Pa., and subsequently in an asylum at Trenton, N. J., died suddenly October 24, in the latter institution.

"Dr." Helmbold, it was always understood, was the son of a horse dealer in Philadelphia. He came to New York and started a drug store in the Metropolitan Hotel, at No. 595 Broadway. That was nearly thirty years ago, when that part of Broadway was the favorite promenade.

BELIEVED IN ADVERTISING.

Helmbold made one of the first moves in the direction of highly decorated drug stores—a field in which, however, he was preceded by the elder Hegeman.

He had a kidney cure called "Helmbold's Buchu" on which he spent hundreds of thousands of dollars in advertising. One of his theories was that if he made himself personally notorious, the public would buy his medicines. "Buchu," he asserted, would cure everything if taken in connection with some other of his patent medicines.

His teams of white horses, his "spike" teams and his lavish entertainments, and his splendid alcoholic excesses all tended to make him known. He said that he spent \$1,000 a day in advertising. He once offered to bet a million dollars in sections on an election. When would-be takers arrived he claimed the privilege of naming the stakeholder. This was agreed to, and he named his coachman, and, of course, bettors were afraid to trust him, and the bets fell through. But those who read about it went out and purchased "Buchu."

THE FOOT OF A TRILBY.

Helmbold was a little nervous man, with a black beard. He was vain almost to the point of mania of the beauty of his feet. It was his nervousness and tendency to epilepsy that helped to drive him to drink.

Many a time it was reported that he had died, but he always turned up again. It was in 1871, when he was in Europe, that he showed the first symptoms of insanity, and afterward at Long Branch, which was the scene of many of his escapades, he tried to kill himself. He was put in Kirkbride's asylum, in Philadelphia, but he escaped in July, in 1876. He was soon discovered with a large supply of whiskey, and put again under restraint.

BROKE DOWN AGAIN

At various time he was pronounced sane enough to be liberated, and his old haunts knew him again. But he invariably began drinking and soon broke down. It is not more than a year ago that he was seen in Broadway with his wife, once a famous New York beauty. She now lives at No. 47 East Seventy-eighth street. Of all the Helmbold wealth only about \$200,000 remains. This has been in trust for his wife for many years, with the understanding that on her death it will be divided among the three sons.

Four drug stores have been made famous by Helmbold. The first was one he started at Eighth and Brown streets, Philadelphia, on a capital of \$50. He had been working for four years with Carpenter & Co., a drug firm of that city, where he learned the value of advertising and besides obtained a good knowledge of drugs. He began to advertise at once.

Soon he started a handsome store in the Continental Hotel, in the Quaker City. On this he spent so much money that Philadelphians never got over wondering about it, and to-day they point to it as a marvel. It was owned by one of Helmbold's sons up to a few years ago.

The "doctor's" next venture was at the Metropolitan Hotel, already mentioned; and he also started a drug store in the Gilsey House. This store occupied the corner of the hotel, which however, has been remodelled since then, and one end of the cafe and the entrance occupy the ground formerly devoted to the store.

DIPHTHERIA ANTITOXIN IN PHILADELPHIA.

The medical profession in this city is all agog over the arrival of a number of doses of diphtheria antitoxin. This precious fluid was received by Dr. Freese, chief resident physician of the German Hospital, sent to him by Consul Meyer. Shortly after its arrival Jessie Hankey of Germantown was inoculated but owing to the advanced stages of the disease, the diphtheria had not the desired effect as the child died six hours after receiving the injection. At the same time the sick child was treated, her sister, who was free from the disease, also received an injection, and although she was in constant attendance on her sister she has not developed any symptoms of the dread disease.

A BACTERIOLOGICAL LABORATORY ESTABLISHED AT THE PENNSYLVANIA HOSPITAL.

The Pennsylvania Hospital has ordered the establishment of a bacteriological laboratory, and that an expert in bacteriology should be added to the hospital staff. Ample arrangements for this and a chemical laboratory will be provided in the recently erected additions to the hospital. For a long time city councilmen have been deliberating on the proposition to erect a bacteriological laboratory that would be under municipal control. The Pennsylvania Hospital realizing how valuable such a laboratory would be in the fight against the scourge of diphtheria, took the initiative by deciding to erect, equip and maintain one at its own expense.

ANOTHER FIRE AT WILEY-WALLACE COMPANY'S.

Wiley-Wallace Company's chemical factory, 133 North Seventh street, was partially destroyed by fire on November 1, and damaged to the extent of \$7,000, \$5,000 being on stock and \$2,000 on the building. The origin of the fire is a mystery. It broke out in the second story and was discovered at 1 o'clock in the morning. The prompt action in sending in the alarm probably saved the building from total destruction. While more or less of the building was destroyed by fire, the principal loss was from water getting to the stock of chemicals and the machinery used in the preparation of drugs and chemical compounds.

This building seems to be an ill fated spot. It has been on fire twice before, besides having an explosion which resulted in the death of Mr. Wiley and two others, besides the injuring of several more. At one time the firm manufactured flash light powder, but owing to its explosive nature (the death of Mr. Wiley resulting from a premature explosion of this powder), the manufacture of it was given up. The stock and building were partially insured, the firm having trouble in getting them insured, owing to the bad reputation the building had.

PHILADELPHIA PHARMACISTS.

Johnson & Johnson have sent out invitations to a number of Philadelphia druggists to inspect their works at New Brunswick.

George Y. Wood, who lately braved the fates and took unto himself a wife has a big reputation for his tooth wash. All the fair ladies of Tenth and Spruce streets use his dentifrice.

The committee appointed by the College of Pharmacy to take action on the Alcohol Tax has not as yet formulated any plan, but it is said that in a short time a circular defining the position will be sent out to all retail druggists.

Harry R. Cushen, who for a long time clerked for E. R. Gatchel, at Tenth and Spring Garden streets, has purchased the store of William Loesch at Eleventh and Somerset streets. Mr. Cushen is a good clerk and has many friends.

The manufacturers of "Garwood's Standard Perfumes" (Schandein & Lind) report a rushing business, both on holiday and regular goods. Their odors are very popular with the trade here, and their holiday novelties were especially attractive.

John M. Peters of New York, the chairman of the Entertainment Committee that did itself proud during the meeting of N. W. D. A., paid a flying visit on October 30 to the Philadelphia Drug Exchange on Third street, above Chestnut.

The Apothecaries' Union is now a thing of the past, as the name of the corporation has been changed to the Philadelphia Wholesale Drug Company, Limited. On October 31, the Union's charter expired, and from now on the company will do business at the old stand.

J. W. Neef, connected with the old Temple pharmacy under the Continental Hotel, has bought the store at 1015 Columbia avenue, which he has had refitted and altered. Mr. Neef is well known, he being considered one of the chief and most successful concoctors of new drinks.

John M. Maris & Co. are busier than ever. They have recently sold an immense amount of China images and

Japanese dolls to the local druggists, who are going to present them to the children of their customers for Christmas presents. Some of the images when taken out of the box were broken, and it is thought that the inanimate Japanese dolls must have been infused with the warlike spirit of their countrymen, and started in to do up the Chinamen.

Shoemaker & Busch have bought out the Climax Confection Co., which is the manufacturer of "Boston's Fruit Tablets." At present nineteen various fruit tablets are being manufactured, the demand for them being so great as to cause the firm to work extra time. It is their intention to increase the number of fruit tablets as the demand warrants. This firm is practically the chief house of this city that handles holiday goods and it says their business in this line is far beyond expectations.

A well-known druggist in discussing the cut rate evil says instead of the pharmacists combining to maintain prices they should form a league to discontinue the sale of patent medicine. He contends that the manufacturer has always dreaded this action, and all his "plans for relief" have been coupled with a requirement that the pharmacist should sell just what is called for. He claims it is difficult to foretell the result of such action, but it could not injure the pharmacist, since his revenue from that source has probably ceased forever.

MICHIGAN.

DETROIT, November 5th.—During the latter part of the month this section of the country has been favored with a stretch of balmy Indian summer weather. Strange as it may at first seem this has not been conducive to very much business, especially in some lines. Boot and shoe people were heard to grumble frequently about the poor weather. A sloppy spell would suit them to a T. Haberdashers want it colder. During the last week both have had their wishes granted, and general trade interests have picked up materially. Country merchants are still conservative about buying and as a consequence retail stocks of every description are very low. They are, however, well selected.

DRUG BUSINESS BRISK.

The volume of business done by the wholesale and manufacturing drug houses remains at the top notch. Pure drugs and patent medicines are moving very satisfactorily. Seasonable goods, such as paints and oils, are heavy. The large amount of sickness in the city and an epidemic of colds combined with the advent of the grip in a new form has made the retailers and doctors busy. There are a large number of diphtheria cases in the city.

PARKE DAVIS & CO. ON THE CONDITION OF TRADE.

A representative of the American Druggist recently called at the great drug establishment of Parke, Davis & Company. The busy hum of machinery was heard on every side and an air of activity pervaded the entire establishment. Joseph Helferman, who has charge of their publishing department, disclosed a few facts in regard to the immense business of his firm. He said:

"We have at present over one hundred paid representatives all over the world and they are sending in bushels of orders. We are so busy that many nights in every month are spent in working. The entire plant is being run to its fullest capacity

and the demand is beyond our capacity for supplying it."

William M. Warren, who is a member of the firm, stated that the firm never has done quite the business before that it is now doing. "We are actually sending out short orders," said he, "What is the reason for this strong demand? I think the retail druggists all over the country appreciate the fact that we are their friends and that we look after their interests as we look after our own. To a large extent our interests are identical and what helps one redounds to the credit of the other."

THE TABLET TRITURATE BUSINESS.

"We have of late received hundreds of letters from our friends and patrons, the retail druggists, commending the firm upon the stand taken in regard to our action concerning tablet triturates. The price of the article was reduced in order to eliminate a factor which was doing great harm to the retailer. Certain exclusive tablet houses were gradually substituting their product for the physician's prescription. An agent of one of these firms would go to the physician and tell that gentleman that the retail druggist was substituting on him and that by having his own prescription put up in tablet form this evil would be avoided. The cost was also represented as being less. The firm of Parke, Davis & Company recognized the fact that this was a demoralizing factor to the drug trade and promptly cut the life out of tablet triturates. That is all there is to it. The retailer is reaping the benefit and the doctors are also getting the benefit. The result has so far been very satisfactory to all concerned except perhaps the exclusive tablet houses."

According to the representations of the above gentlemen the condition of the drug trade in general is in a very prosperous condition.

Edward Hing, aged fifteen, an employee of Parke, Davis & Company, recently died rather suddenly. While at work in the afternoon, the lad complained that he was not feeling well. He went home, laid down upon the bed and almost immediately expired.

MICHIGAN NOTE.

Knapp & Knapp have given a chattel mortgage on their stock of drugs for \$500 in favor of Mary A. Knapp.

H. C. Kinnie of Corunna, will shortly start a drug store at Tecumseh, Mich. It will be located in the vacant store of Allen & Granger.

E. W. Gallagher of Saginaw, has sold his interests in his drug store at the South End. E. P. Hess will hereafter conduct the business.

Burglars recently effected an entrance to the drug store of Key's drug store at Salzburg. They carried away a quantity of goods and all his spare change.

Alsford & Son, druggists at Lansing, recently exhibited some jumping beans in their show windows. Rats ate seven dollars' worth one night last week.

E. T. Miller druggist at Flint, M at Schwartz Creek, has gone out of the business. The store is now being filled with a stock of general merchandise.

Mrs. R. Opperman has sold the stock and fixtures of the drug store at 17 Cadillac Square, to the estate of John C. Scherer. The consideration named in the bill of sale was \$5.

W. R. Hall of Manistee is having two large plate glass windows placed in his drug store front. He is also making changes on the inside which will greatly improve the looks of the store.

John G. Wolf, of Hillsdale, has bought the store formerly owned by the Messrs. Collins, of Blissfield.

H. F. Wyatt will shortly open a drug store at Adrian. It will probably be conducted on the cut rate plan.

The drug store of Eppley & Company, at Constantine, Mich., has been purchased by Willis Fox, of Lafayette, Ind.

C. Alsdorf & Son, of Lansing, have dissolved partnership. The business will hereafter be conducted by Cyrus. His father has withdrawn.

Frank W. Perry has bought out the drug stock of D. E. Smith & Company, located at 78 Grand River avenue. The consideration is not known.

The stock of drugs and wall paper of H. A. Sorg & Company, at Marine City, has been purchased by McElroy & Leitch, of the same city, who will continue the business.

The druggists of Saginaw recently organized under the name of the Saginaw Pharmaceutical Association. The object is mutual improvement, both socially and in a business way.

Augustus N. Goodwin last week filed a chattel mortgage on his stock of drugs at 257 Joseph Campau avenue, Detroit, for \$360 in favor of Williams, Davis, Brooks & Company.

The Burrell Chemical Company which manufactures wood alcohol, may soon be compelled to close down, owing to the big drop in the price of their product caused by the new tariff law.

J. Howard Green, of Battle Creek, has sold his drug store to Herbert Fisher from the northern part of the State, who will conduct the business. Mr. Green has gone to Ann Arbor where he will study law.

Charles T. Eckerman, of Muskegon, will shortly leave there to start a drug store at some point in Illinois. He recently passed a very creditable examination before the Illinois State Board of Pharmacy.

Chris DeJonge of Zeeland is preparing to go into the peppermint industry on a wholesale scale. He will eventually have 200 acres under cultivation, which will yield on an average twenty pounds of oil to the acre.

Charles Bugbee of Cheboygan, has purchased a half interest in Beaman's drug store at Charlevoix. Mr. Bugbee, who will personally conduct the business, is a member of the State Board of Pharmacy and a druggist of large ability.

Carl G. Printz, formerly a druggist of Hancock, but now of Astoria, Oregon, was recently reported killed. Information has been received which contradicts this. He is alive and running a very successful store in the far west.

Detroit has added another to the already large army of medical publications the latest addition being a monthly magazine issued under the title of "Therapy" by Nelson, Baker & Co. [The subscription price of the new journal is placed at 25 cents per annum.

Ferdinand Thum, of Grand Rapids, has sold his drug store there for \$13,000 to Walter K. Schmidt. The latter gave the former a chattel mortgage for the amount and will pay it in weekly installments of \$40. The store is located at 84 Canal street.

On October 9, Levi A. McDermott and Robert Sloan filed a chattel mortgage in favor of Francis E. Loranger for \$1,250 on the stock of drugs at 291 East Congress

street. The mortgage was assigned to Minnie Loranger and was afterwards discharged.

H. C. King and Wm. Vaughn of King's drug store at Oscoda, have purchased a store at Alpena, and will operate the same in partnership. Mr. King will not remove to Alpena, but has placed the entire charge of the business in the hands of Mr. Vaughn.

Valentine Schroeder's Money Musk chewing gum factory is a new institution at 31-33 Griswold street. It employs twenty men and has a capacity of 6,000 boxes per day. He has agents in every section of the United States and a branch office at Los Angeles, California.

Travis & Baker, the leading druggists of St. Johns, have improved the looks of their store by putting in a handsome new prescription case. This enterprising firm, feeling the need of catering to a growing trade, are constantly enlarging their store and otherwise improving it.

A dispatch from Chicago last week stated that a fire occurred in a branch office of the Detroit White Lead Works. It was alleged that the loss was \$25,000. The firm has a branch concern at 114 Lake street, Chicago, but at this end they say that the loss could not have been more than \$6,000.

John J. Wolf, of Hillsdale, has sold a two-thirds interest in his drug store to Messrs. H. M. and E. M. Collins. The firm name will hereafter read Wolf & Collins. E. M. Collins, who has been in the drug business at Blissfield, will remove to Hillsdale and be associated with Mr. Wolf in the immediate conduct of the business.

Fred Brundage, wholesale and retail druggist of Muskegon, is something of an artist in the way of getting up window displays. He has constructed in one corner of his show windows at the corner of Western avenue and Jefferson street, an artificial lake. Its borders are surrounded with high grass, while on its surface float boats and ducks. It has an exceedingly realistic appearance.

Bell's drug store at Benton Harbor, was recently robbed of a large amount of goods. Otto Cebolt was arrested for the offense and allowed to go on \$300 bonds. Last week he failed to appear for trial, and his bonds were declared forfeited. The boy's mother gave a chattel mortgage on her home to secure the bondsman, but as they are lawyers and cannot go bonds for a criminal, he will probably escape altogether.

An amusing incident recently occurred in one of the leading drug stores of this city. The proprietor carries a large and choice line of cigars. Several times of late he has been done up by persons who tended him a bank bill of large denomination. Of course he couldn't change it or else couldn't spare that amount. A young man about town came in the other day and purchased 50 cents worth of cigars. He coolly bit off the end of one and stuck the rest in his pocket and threw down a bill all wadded up. It proved to be \$100. "Is this the smallest you have?" asked the druggist. Upon receiving an affirmative answer he suddenly tore the note in two and told the astonished young man that he could have the other half by settling up. He settled the next day.

TONKA VANILLA EXTRACT.

Edwin N. Caldwell, representing the Caldwell-Hicks Company, manufacturers of flavors and extracts, recently went to

Cleveland, Ohio. He was the proprietor of a booth at the pure food exposition: Among his wares were bottles labelled pure vanilla, extract. Many were sold to visitors. Assistant Dairy and Food Commissioner Stewart procured one of the bottles and made a chemical analysis of the extract. He found that the liquid was not an extract of the vanilla bean alone, but of a combination of tonka and vanilla beans. The Ohio law provides that all manufactured articles used in any way as food or drink shall be labelled properly. The labels he claimed on Caldwell's vanilla extract tended to deceive the purchaser. Caldwell was arrested and taken before a justice where he pleaded guilty. He was fined \$50 and costs. Caldwell says he has not a very high opinion of Ohio law and justice. His extract he claims is as good as if not superior to many other makes. It would seem as if it was a small point to stick on.

OHIO.

CINCINNATI, O., Nov. 3 1894—Since the last issue of this journal there has been no decision reached in the cases of the druggists under arrest for selling adulterated goods. The cases remain in statu as it were. Justice Winkler threw the Paskola case out of his court on account of an alleged flaw in the affidavit and Pharmacist Hall was arrested again on a new affidavit and arraigned before Squire Tyrrell. The case was set for hearing last week but on account of the death of the Justice's wife it had to be postponed until the 12th inst.

THE CASE AGAINST PASKOLA.

President White and Chemist Russel of the Paskola Company have taken their departure from the city, but it is said will return in time to be present when the case against Hall is called for hearing. The gentlemen representing the Predigested Food Company, which is the name by which the makers of Paskola are known, tried in every way to compromise the case against Hall, but the officers of the Food and Dairy Commission were obdurate and would listen to no offers of settlement save through the regular channels of the law. Much interest is centered in the Paskola case by local pharmacists, and the court room will doubtless be thronged when the case comes up for hearing.

VIN MARIANI.

The case of the State against "Uncle" John Keeshan for selling Mariani wine will doubtless be settled without trial. Attorney Litchfield, representing the Vin Mariani Company of New York and Paris was here and succeeded in convincing Professor C. T. P. Fennell, that the basis from which his analysis was made was wrong. In other words that the crop of coca varies so much that no fixed standard can be made for the percentage of cocaine in Vin Mariani. Professor Fennell gave Mr. Litchfield a letter certifying the above facts, and the case against "Uncle" John Keeshan will accordingly be dismissed for want of prosecution. This practically settles all further litigation in Ohio against Vin Mariani.

The case against John Keeshan will not be prosecuted and the defendant will be dismissed when the suit is called.

UNFERMENTED GRAPE JUICE.

The case against J. W. Vester, a clerk at Weatherhead's drug store for selling unfermented grape juice was tried in Squire Winkler's Court on the 3rd inst. The case was fought bitterly by opposing

counsel, and excited intense interest among druggists and liquor dealers. Chemists Dickore and Morgan analyzed the grape juice for the defendant and this analysis was nearly the same as that of Professor Fennell. The latter discovered .06 of salicylic acid and the former .04. A special charge was given to the jury, however, specifying that the product must have been sold to be used as a beverage, and that the State must prove that fact. After remaining out for two hours and a half the jury failed to agree. A temporary victory was thus gained by the druggists. Weatherhead's case will not be tried again until the case against Louis Heister is tried, which will be some time this week.

MADAM RUMOR'S WORK.

John Bauer has renovated his drug store at Sycamore and Milton streets.

The Amory Pharmacy on Freeman avenue is one of the swell establishments of the West End.

George Kylius has set apart one night in the week to take in the leading show in town. He is now a regular first nighter.

Mueller's Pharmacy on Race street is now the cynosure of all eyes. The show windows are the talk of the shoppers as they pass the place.

Louis Sauer is now a very happy man. For some time past he has been an earnest advocate for better sewerage for the West End and the B. of L. has promised to assist him.

R. H. Weatherhead, the well known druggist, has put in a new center show case and cashier's desk in his place. The improvement has cost something like \$2500.

Serodina's Pharmacy at Fifth and Walnut streets, is to surpass any store in the city as soon as it is completed. The natural wood fixtures are now being made by a well known eastern firm.

Bernard Cahill, one of the best known young pharmacists in the city, who has been in charge of the prescription department at Klayer's Pharmacy for some time past is now at Sixth and Mound streets.

Joseph Lambert who recently sold his store at Park avenue and McMillan streets, Walnut Hills, to Herman Koehken, a clever pharmacist, is going into the tobacco brokerage business in the bottoms.

Ed. Voss is the possessor of a canine that growls at its own shadow. Harry Striethorst says the only remedy that will benefit the beast is chloroform. Voss is going away and Striethorst is going to experiment on the dog.

Local jobbers report a general improvement of business all along the line. The traveling men who make headquarters here all report a marked improvement in trade in the interior of this State and in Indiana. Billy Hale is accordingly very busy.

Dr. Charles Woher and Dr. J. C. Otis, two well known druggist-physicians, who are staunch Republicans as well, were looked upon as sure-thing candidates for Coroner before the late G. O. P. convention. Dr. J. A. Haerr slipped in, however, and secured the prize.

One of the local daily papers came out a few days ago with cuts of the leading advertisers. Among the list was our old friend Al Boehmer, who was decidedly the best looking man in the list. This

goes, no matter if it does cause jealousy in the ranks of the other pill rollers.

Mr. and Mrs. Wilmot J. Hall have taken up their residence for the winter at the Hotel Alms on Walnut Hills. The many friends of Mr. and Mrs. Hall will be sorry to see them leave Avondale, the classic suburban village, where they have so long been prominent in church and social circles.

After the case against Heister has been tried Wilmot J. Hall will be tried for selling Paskola, an alleged predigested food. Eminent counsel has been employed in this case and a battle royal in a legal sense is certain. As stated above the Paskola people have been here and succeeded in getting a good idea of the lay of the ground.

The College of Pharmacy is gliding along in smooth shape and a number of decided improvements have not been overlooked by the students, who are not an unappreciative lot. The journal issued by the staff of the college, which was to have appeared a month ago, has not yet made its appearance.

Professor C. T. P. Fennell is authority for the statement that a number of druggists are now using wood alcohol in the preparation of tinctures. In the event that this proves true there will be some lively times in the near future. The officers of the Food and Dairy Commission are gathering samples and these will be submitted to Professor Fennell for analysis. Then the arrests of those from whom the samples have been secured may possibly follow.

A number of local druggists recently received circulars from Secretary Van Nes, of the Ohio Spirit and Wine League in reference to the branding of low proof spirits under the names of bourbon and rye. Dr. McNeal, the State Food and Dairy Commissioner, says these names should not be used except for 100 per cent. proof whisky, and that in the event they are used litigation will follow. The crusade against the grocers for selling adulterated mustard and spices is still going merrily on, and the druggists are watching the war with much interest.

In the case of Sadie Cullen vs. A. Meyers & Co., of Hamilton, in which plaintiff asked for \$5,000 damages on account of an alleged mistake made by a clerk in defendant's drug store in giving her a cantharides instead of a surgeon's adhesive plaster, as requested, the answer and cross petition has been filed. Defendants make a sweeping denial of the allegations. They allege conspiracy on the part of Sadie Cullen and her husband to injure their business, and say that they have been damaged by the publicity of the case in the papers to the extent of \$5,000, wherefore they pray that they may have judgment against Sadie and Erastus Cullen for the aforesaid amount.

The Minnesota Board held its examinations at Minneapolis, October 18. Out of a class of thirty-five the following passed the examination successfully and were granted certificates: Walter S. Gemmel, St. Paul; Elmer G. Miller, Minneapolis; Guy Halgren, Watertown; George O. Torgeson, Montevideo; Edward G. Bassett, Stillwater; Charles J. Ertel, Maple Lake; Charles H. Draper, Wells. The following passed as assistant pharmacists: Theodore Boss, Mankato; Merten Coan, St. Paul; Roy Bell, Grand Rapids; Charles H. Brown, Little Falls; Hans O. Hanson, Rushford.

MISSOURI.

ST. LOUIS, October 8.—Winter has made its appearance. The "up to date" druggists have already laid in their winter stock of cough drops, rock candy, licorice, etc., and are busy making up their usual supply of good old reliable cough syrup, while the physicians of the city are getting their closed carriages in readiness for bad weather service.

SODA WATER A BACK NUMBER.

Most of the soda water fountains have been closed down for the winter and the young gentleman with the white apron is taking a long vacation. Prescription business is on the increase all over the city and general trade is also reported to be on the gain. The wholesale houses tell us that their business throughout the country is on the boom and nearly all the wholesale drug firms in this city have put an extra force of salesmen on the road.

THE STATE BOARD OF PHARMACY.

The next examination of the Missouri Board of Pharmacy will be held in this city at Liederkrantz Hall on the first Monday in January. At the last examination of this Board, held in this city a few weeks ago, Secretary Sennewald invited the faculty and trustees of the St. Louis College of Pharmacy, as well as a number of other prominent druggists to be present and assist in the examination. Secretary Sennewald also extends an invitation to the members of other State boards of pharmacy to be present at the examinations. Mr. Sennewald tells us he has long had a desire to be present at our examination of the Board of Pharmacy of one of our neighboring states who boast of their fair and high grade examinations, and he has even gone so far as to tell the members of that Board of his desire, and they have promised a number of times to notify him when their examination was to be held but he has been waiting two years now without receiving any communication from that honorable body.

ONE FORTUNATE DRUG CLERK.

There is at least one happy drug clerk in our city in the personage of a heavy weight, fine looking German gentleman,—wears glasses as a rule,—who is at present looking for a desirable location to open a drug store. A short time ago this young drug clerk commenced paying his respects to one of St. Louis' most fair and wealthy young ladies. His visits were so agreeable to the young lady that she complained of his not calling more frequently, and when he convinced her that it was due to his close confinement at his employer's store, she wrote him out a check for enough to buy a good drug store, and told him to resign his position. This young gentleman is well known in St. Louis drug circles, and this will probably explain to many of the boys the cause of that happy smile on his face.

DRUG CLERKS' BALL.

On Thanksgiving evening, November 29, the St. Louis Drug Clerks' Society will give a ball at Liederkrantz Hall. This will be quite a select affair. The boys are using the greatest precaution in the distribution of tickets, to see that none fall into the hands of improper persons. Each member of the Society takes two tickets at one dollar each. He may sell them both if he sees fit, but by each member guaranteeing two dollars, they will have enough money to get up a ball in good shape. At their next regular meeting on November 9, Prof. Francis Hemm will be present and address the boys. It is hard to tell just what will be the nature of the professor's address, but we may be sure it will be words of encouragement.

ST. LOUIS SANITARY WORKS.

The citizens have won their case, the "stink factory" is condemned, and it now remains for Chief Health Commissioner Homan to enforce the decision. The decision was rendered to-day, and those south end citizens who have been fighting this nuisance, so hard and so long, feel like celebrating this day. The success of the citizens in this case can truly be attributed to St. Louis' leading pharmacist, Prof. Francis Hemm. He was elected their leader at the start, and has done the bulk of the work all along.

ATTENDANCE AT THE COLLEGE.

The classes at the College of Pharmacy are swelling day by day. The laboratory classes are larger than any previous year. Owing to the many requests of the students for a number of years past the college has decided to inaugurate an optional prescription class, to be in charge of Prof. Hemm.

The course will consist of a few lectures on prescription work followed by a great amount of practical work. The class will meet Wednesday afternoons from 3 to 5. The first lecture will be on next Wednesday, November 7. Prof. Hemm announced to his senior pharmaceutical laboratory class, at the beginning of the term that he would give two prizes to the two students presenting the best set of 24 pharmaceutical preparations. It is not known what the prizes will be, but a number of the boys are apparently working very hard for the honors.

NEWS ITEMS.

The Pope's Theater Pharmacy has recently changed hands.

W. J. McCormick was recently installed as head clerk at Brant's Pharmacy.

Fred. W. Karnter has decided to quit clerking and try proprietorship.

W. R. Brant, pharmacist at 3718 Olive street, is away on a grand hunting and fishing expedition.

O. B. Strub, a well known drug clerk, is slowly recovering from a severe siege of typhoid fever.

The report of the city Health Commissioner shows 130 less deaths last month than for one year ago.

Gustave Kring has removed his store from 2844 South Seventh street down to Broadway and Lynch street.

Louis Kaufman has just taken up the duties of head clerk at Pockles' Pharmacy, Gravois road and Jefferson avenue.

The Stegner Drug Co. of this city has changed hands and names; it now goes by the title of The Sohn & Co. Pharmacy.

Fred A. Barton, proprietor of the St. George Pharmacy, has just got home from Virginia, where he was called by the death of his father.

Otto Claus, the handsome druggist at Ninth and Montgomery, has entered upon a course of medicine at the Marion Sims Medical College.

Theo. F. Hagenow, druggist at Fifteenth and Choteau avenue is just getting up from quite a siege of sickness. He was confined to his bed for about ten days.

H. W. Barkhoefer, proprietor of the very unique drug store at 4201 North Eleventh street, will soon open up a new drug store at Florrisson and John avenue.

Some thieves recently broke into the Pool Pharmacy, Fifteenth and Washington avenue, and stole some clothing belonging to the proprietor and head clerk.

S. E. Barber, President of the St. Louis Drug Clerks' Society and city salesman for the Meyer Bros. Drug Co., has been laid up for several days with chicken pox.

C. F. Bade, Fourteenth and Madison street has been confined to his bed about a week but is now improving. Mr. Bade was just getting his new store in good running order.

The store of R. G. Henderson & Co. narrowly escaped being destroyed by fire a few days ago. As it was the fire was discovered before it had made much headway and they escaped with about one hundred dollars damage.

The Postoffice Department has declared to be fraudulent fifty-six companies engaged in selling prepared medicines at South Bend, Ind. The Department has been informed of other companies at Cairo, Ill., engaged in this business, and is now conducting an investigation into them. It is known that there are many others in different parts of the United States, but they have not officially been brought to the attention of the Department. The order issued by the Department against the South Bend companies prohibits them from using the United States mails.

The Maryland College of Pharmacy has elected its officers for the class of '95 as follows: L. C. Raiford, of Virginia, president; John L. Godwin, first vice-president; J. P. Monroe, of North Carolina, second vice-president; William C. Powell, of Maryland, treasurer, and Mr. Loveland, of Pennsylvania, secretary.

VIRGINIA.

Richmond, October 29.—The State Board of Pharmacy has issued a statement regarding the new pharmacy law of Virginia in which the attention of merchants throughout the State is directed to the feature of the poison law which prohibits the sale of all kinds of poison except by a properly qualified registered druggist. Embraced in the list of poisons is arsenic and its preparations, and as paris green, so largely used by truckers and gardeners for the destruction of potato bugs and other noxious insects, is one of the latter, depending chiefly for its efficacy on the arsenic it contains, the board notifies all dealers in it that the law will be strictly enforced in the future, and its sale confined only to those who are legally authorized.

The statement referred was made public with the provisions of the pharmacy law at the first meeting of the board in Richmond, Oct. 18.

PROVISIONS OF THE LAW.

Section 1759, of the code of Virginia, as amended by an act of the General Assembly approved March 5, 1894, provides that "it shall not be lawful for any person to engage in the business or occupation of compounding or dispensing medicines or prescriptions of physicians, or otherwise, or of selling at retail any drugs, chemicals, poisons, medicines, or pharmaceutical preparations within this State without first obtaining a certificate of registry, as provided."

THE POISON SCHEDULE.

George Anderson was appointed assistant chemist of the department for twelve months.

Section 1763, of the Code, as amended by the same act, prescribes the following: "It shall not be lawful for any person having authority to sell or dispense medicines or poisons, to retail any poisons enumerated in the following schedules, "A." and "B." without distinctly labeling the bottle, box, vessel or paper in which said poison is contained with the name of the article

and the word "Poison" and the name and place of business of the seller, and in addition thereto at least two of the most readily obtained effective antidotes to such poisonous article.

"Schedule 'A.'—Arsenic and its preparations, corrosive sublimate, biniodide of mercury, cyanide of potassium, hydrocyanic acid, strychnine and its salts, and essential oil of bitter almonds.

"Schedule 'B.'—Aconite, belladonna, nux vomica, savin, ergot, cotton root, cantharides, digitalis, colchicum, conium, henbane, and their pharmaceutical preparations; creosote, cotton oil, chloroform, chloral hydrate, carbolic acid, oxalic acid, white and red precipitate, morphine and its preparations, opium and its preparations, except paregoric, and other preparations of opium, containing less than two grains to the ounce, and all other deadly poisons."

This law, however, does not prevent the sale by merchants of quinine, epsom salts, castor oil, essence of peppermint and the following preparations: Calomel, camphor, iodide, bromide and chlorate of potassium, paregoric and sweet oil, and such other domestic and proprietary medicines as are usually kept by retail dealers; but the sale of laudanum, morphine and proprietary medicines must be in original packages as obtained from druggists.

Any person violating the provisions of sections 1759 and 1763 shall be deemed guilty of misdemeanor, and upon conviction thereof shall be fined not less than \$10 nor more than \$100, and each day that the said provisions, or any of them, are violated shall constitute a separate and distinct offence.

The first examination for the registration of pharmacists under the new law was held in Richmond, October 18, when thirty-three applicants presented themselves for examination.

The following is a list of the successful candidates:

REGISTERED ASSISTANTS.

T. H. Brennaman, of Harrisonburg; W. A. Capps, of Norfolk; Max Eckert, of Richmond; John F. Gibboney, of Richmond; W. E. Hancock, of Fredericksburg; E. T. Herbert, of Richmond; M. C. Judd, of Richmond; P. H. Maddox, of Crew; W. E. Shavers, of Richmond; T. Wilkins, of Portsmouth; R. J. W. of Richmond; R. L. Gaylord, of Norfolk; G. W. Webb, of Charlottesville.

REGISTERED PHARMACISTS.

H. R. Coleman, of Charlottesville; E. Thomas Hargrove, of Suffolk; E. F. Hudgins, of Norfolk; B. L. Hume, of Lynchburg; Roshier W. Miller, of Richmond; W. G. Smithers, of Richmond; David P. Turner, of Lynchburg; Oscar Williams, of Hampton.

After the transaction of some routine business of minor importance the board adjourned, to reconvene, according to the provisions of the pharmacy law, for its annual meeting in this city on the third Monday in March next.

TO HAVE AN ASSISTANT CHEMIST.

The matter of employing an assistant chemist in the State Board of Agriculture which was discussed at the last meeting came up again at the meeting on October 15. Letters received by Mr. Gaines from expert chemists in this and other States, proved that the work done in the fertilizer department was excessive for two chemists, and could not possibly be done by one man, no matter how competent he might be.

On motion of Mr. Mallory, Mr. St.

In view of the increased use of fertilizers by the farmers of the State, the board evinced an earnest disposition to make the fertilizer control prompt and effective, by giving the farmers the fullest information in regard to the value of fertilizers used by them.

RICHMOND NOTES

Mr. Sanford, clerk for Cary Bros., on Brooke avenue, was married recently.

Charles Lath is now doing relief work for J. A. V. Ramas, 1300 West Main street.

M. Fiels Seay has purchased the store at 334 South Pine street, formerly owned by C. H. Danset.

L. M. Favis has moved his store from Gilmer and Broad streets, to Monroe and Broad streets, his former stand.

R. J. Wood, formerly with R. H. M. Harrison, is now with Dr. Garlick at Boston Heights, a suburb of Richmond.

Dr. J. P. Cleveland, of Glasgow, Va., is contemplating opening a drug store near the Market-house. When the new Postoffice is occupied that will be a more frequented part of the city than now and will invite business to extend in that direction.

Thomas Leonard's store on North Second street has been thoroughly remodelled and fitted until it is one of Richmond's handsomest stores. The shelving is done in cherry, the counters are of the same wood and the prescription case is a model for convenience and neatness, it being fitted with sliding shelves and slabs of plate glass for manipulating powders and ointments. The fluid extract cases are deserving of especial mention. They are provided with amber glass fronts, thus protecting the drugs and preparations stored therein from injury by light. A beautiful pier mirror is let into the front of the prescription case, the room is handsomely papered, and the floor is covered with linoleum, the whole being a model of good taste.

TENNESSEE.

NASHVILLE ITEMS.

It is rumored that two of our young druggists are matrimonially inclined.

Both of our jobbers report trade steadily increasing and are buying accordingly.

D. L. Martin has moved a few doors below his old location at Line and Vine streets.

W. Enson, Dr. Roscoe's genial clerk, has been upon the sick list but is again able to fill prescriptions.

The local druggists are actively aroused and Nashville will be heard from regarding the 1896 meeting.

Nashville is a good point for the Inter-state League officials to try, as all the druggists seem to be under bondage to two cutters.

R. L. Evis and A. H. Roscoe purchased the greater part of the new stock of J. H. Maybury at about 10 cents on the dollar at auction sale.

W. T. Harwell, of Harwell & Barr is upon the sick list, Wm. Jackson holding the position during Dr. Harwell's temporary absence.

R. H. Gordon, President, and J. O. Burge, Secretary of the Board of Pharmacy, attended the regular meeting at Knoxville, Oct. 9th.

The nomination upon the democratic ticket of R. H. Gordon, President of the Board of Pharmacy, to represent Davidson

County in the next Legislature, practically insures proper amendments to our pharmacy laws.

STATE NEWS.

H. D. Burt & Co. is a new firm at Cornersville.

Barnes & Etter is the style of a new firm at McMinnville.

C. W. Booker & Co. have opened a new store at Bell Buckle.

S. S. Gray, formerly with Page & Sims of Nashville, is now with Jas. O. Robinson of Memphis.

The trade of Memphis deeply regret the death of their representative on the Board of Pharmacy, Mr. Laurensen. J. S. Robinson has been appointed by Gov. Turney a member of the Board of Pharmacy to fill the vacancy caused by the death of Mr. Laurensen.

A Tennessee druggist, who sleeps in the rear of his store, has a parrot that is invaluable as a night watchman. Burglars entered the store the other night, when the parrot flew to the druggist's room and roused him in time to save his cash drawer, which contained a considerable sum of money. The burglars were captured.

Pharmacy Examinations in Quebec.

The Board of Examiners of the Pharmaceutical Association of the Province of Quebec, held their Semi-Annual Examinations in Laval University, Quebec, on Tuesday and Wednesday, October 23 and 24, when fourteen candidates for the major and eighteen of the minor examination presented themselves, of these the following in order of merit passed successful examinations and are entitled to be registered as licentiates of pharmacy and certified clerks respectively, namely:—As "Licentiates of Pharmacy," James Shea, Quebec; H. W. Reynolds, F. O. Anderson, W. A. Hendric, R. N. Miller, A. Savard, Montreal; Alphonse Martineau, Quebec. As "certified clerks," J. Levesque, A. Brillou, A. Carruthers, Roch. Des-Islets, Joseph Bontin, A. C. Paquetti, Wilfred Giroux, Montreal; Damas Jollicrem, Quebec; Wilfred Hebert, Three Rivers; F. L. Woolley, Montreal; E. Brodem, St. Hyacinthe; Alphonse Vielheux, Quebec. The candidates were examined in written and oral chemistry, materia medica, botany, pharmacy, reading of prescriptions, practical dispensing, and weights and measures. The examiners were Messrs. S. Lachmer, W. H. Chapman and J. R. Parkin, Montreal; A. E. DuBerger, Waterloo; R. W. Williams, Three Rivers.

The California Board of Pharmacy.

A special examination meeting of the California State Board of Pharmacy was held at Los Angeles, October 2d. Eight candidates presented themselves for examination as licentiates, of whom the following named were successful: L. J. Huff, H. M. Newlon, F. E. Apel, A. H. Liscomb. There were three candidates for assistant certificates, the following named being successful: Murray Horne and C. F. Clapp.

A regular session of the Board was held at San Francisco October 10th. Fourteen candidates appeared for examination as licentiates. None of the number succeeded in securing the required percentage. Twenty were examined for assistant certificates, and the following named thirteen passed: J. Norton, N. R. Urnuela, G. E. Strout, G. A. Cook, C. E. Longden,

Otto Seyfried, L. T. Munroe, W. M. Muller, L. D. Fairbank, P. L. Moore, J. J. Gloria, L. Graham, A. M. Ormiston.

Six were allowed registration as assistants on their examination as licentiates, namely, P. V. Goodloe, A. Byrne, J. MacLeod, F. DeGrancourt, H. W. Little and E. S. Rosenberger. The following named were registered as graduates in pharmacy: R. J. McClure, G. A. Green, Lincoln Fittell, J. A. Lyon, and Harry Barndollar. There were registered without examination as licentiates Louis Pierre Minier and Emile Ramlot. The next examination will be held January 9th, 1896, at 113 Fulton street, San Francisco.

The calendar embracing the general statistics of the twenty universities of the German Empire has just appeared, and the following facts are therein stated. In all there were during the past year 28,418 students. Of these 8,684 were students in medicine, 7,776 in law, 8,836 in theology of the Evangelical Church, 1,469 Catholic theology, and 7,158 in philology. The science students appear to be grouped with the medicals. Berlin heads the list, and the remainder follow on in the order given: Munich (8,744), Leipzig (8,764), Bonn (1,684), Halle, Freiburg, Wurzburg, Breslau, Tubingen, Heidelberg, Strasburg, and Marburg. All the remainder have less than 900 students.

Meeting of German Scientists.

The sixty-sixth convention of German naturalists and physicians was held at Vienna, from September 23d to 29th, and International Congress of Chemists of Food Products was held at the same time and place. The proceedings of the section on pharmacy were opened by Anton von Waldheim. About fifty pharmacists were present including Eugen Dieterichs, Prof. H. Beckurts, Thomas Grenish, of London, Prof. Hartwich, Dr. Hans Heger, editor of the Pharmaceutische Post, Prof. E. Schmidt, H. Thoms, Prof. A. Tschirch, Prof. Hermann Peters, Prof. Ed. Schar and Dr. Fred. Hoffman of New York, editor of the Pharmaceutische Rundschau.

Prior to the calling of the second session the members of the section attended a special joint meeting of the Austrian Pharmaceutical Society and the Vienna local society which had been convened in honor of the scientists.

Professor Tschirch presented the Fluckiger Medal to Prof. Aug. Emil Vogl of the University of Vienna. After the election of honorary and corresponding members the Austrian society gave way to the section on pharmacy.

During the various sessions of this section the following papers were presented: "The relations of Hyoscyamin Scopolamine and Hyoscine to each other" and "The relations between corydalin and Berberine" by Dr. E. Schmidt of Marburg; "Plant Secretions and their Production," and "The Fermentation of Nutmegs" by Prof. A. Tschirch of Berlin, and "The Sources of Storax" by Dr. Moeller of Gratz. "Tincture of Gualac as a Reagent" by Prof. Ed. Schar of Strasburg; "The Valuation of Drugs and their Preparations; Particularly Extracts and Tinctures," by Prof. H. Beckurts, of Brunswick; "The Examination of Beeswax," by A. Kramel of Vienna; "Aluminium Boroformicate" by J. Martenson of St. Petersburg; "The Examination of the Rarer Kinds of Opium" by E. Dieterich of Helfenberg;

"Corydalin" by Prof. E. Schmidt of Marburg; and "The Mydriatic bases Atropine Hyoscyamins, Scopolamine and their Decomposition Product, Scopolin," by the same authors; "The Present Status of Sugar Estimation in Urine," by Dr. Ad. Jolles of Vienna; "Thioform, or basic Bismuth Dithiosalicylate," by Dr. Thoms, of Berlin; "The Future of Pharmacy as Affected by the Advance of Bacteriology," by Dr. Jos. Schrank; "The Methods of Morphine Estimation," by Dr. G. Sacheri; "Illicen, a New Carbohydrate," by Drs. Schneegaus and Bronnert, "Fouquiera Splendens," and the "Reaction of Morphine and Acetanilid on Ferric cyanide and Ferric chloride," by Prof. Schar, "International Pharmacopoeias" by Prof. Anton V. Waldheim, "A Comparative Review of the Formulas of the Newer Pharmacopoeias" by Dr. Ad. Kwidra, of Vienna; "The Examination of Wax" by Dr. M. Mansfeld, "The form of the Medicaments of the Egyptians According to the Papyrus Ebers," by Freiherr v. Oefele, of Neuenahr, "Loretin," by Dr. F. Soth, of Vienna.

Among the papers of interest pharmacists presented before other sections of the association were the following: "The Use of Behring's Diphtheria Serum" by Drs. Behring and Ehrlich; "The Action of Some Tropolines" by Dr. Gottlieb; "The Examination of Cubebs" by Prof. Vogl, of Vienna; "The Phylloxyenic acids and Some of their Compounds" by Prof. Tschirch of Berlin.

TRADE NOTES.

The Frommer Malt Extract Company of Cleveland, O., are giving away free to customers some very handy penholders of aluminum.

H. Schedler issues an illustrated catalogue of terrestrial, celestial and relief globes suitable for schools, colleges and libraries. A gratuitous copy can be had on request to H. Schedler, 21-27 New Chambers street, New York.

Write the Campbell Cutlery Company, Syracuse, N. Y., for circulars of instructions for measuring show cases, and turn to the advertising pages of the American Druggist for an illustrated description of the Practical Sliding Display Tray.

T. Metcalf & Co., the well-known Boston firm of manufacturing pharmacists and apothecaries, are adepts in the use of printers' ink. We saw a little folder recently containing announcements of a list of pharmaceutical specialties which made a very neat appearance indeed. Copies of this can doubtless be had upon application to the firm.

Druggists who believe in pushing their own goods to the exclusion of the profitless patents of the proprietary manufacturers, should communicate with C. B. Smith & Co., wholesale druggists, 863 Broad street, Newark, N. J., who, will show them how to stock and sell preparations that will yield a profit. Their price list contains particulars—send for a copy.

The Royal Pepsin Company, manufacturers of the Royal Pepsin Compound, 84 Warren street, New York, issue a neat compilation of elixir formulas. The majority of the formulas are it is stated taken from the National Formulary, while others are working recipes taken from the laboratory books of the company. A copy will be sent free to any druggist who makes application to the address given above.

We would advise every retail druggist who has not yet secured a copy of Low's Hot Soda Fountain book to write for one at once. It contains illustrations of new fountains and section cuts showing the automatic workings of the apparatus. Address the Low Art Tile Co., Chelsea, Mass.

The neatest and best method of storing herbs, powders, and the thousand and one stray packages of roots, etc., which accumulate in a pharmacy, is found in the use of the square and rectangular gilt cans made by Joseph G. Taite's Sons, Philadelphia. They can be ordered direct from the makers or through any firm of wholesale druggists. Write them for particulars.

We have received No. 1, Vol. 1, of "Therapy," a new quarterly journal of medicine published by Nelson, Baker & Co., manufacturing pharmacists, Detroit Mich. "Therapy" says it will be its publisher's organ, only in so far as it may from time to time make or permit mention of such specialties as the house manufactures for use exclusively on the physician's prescription. The subscription price of "Therapy" is 25c.

Attention is invited to the advertisement of the Rochester Show Case Works in another part of this issue. Porter Farley, who is the proprietor of these works, is an extensive manufacturer of cases for druggists and cigar dealers and the accompanying illustration will convey an idea of the kind of work done. His catalogue will be found useful by any druggist who contemplates a change in fixtures. Drop him a postal card for one, mentioning the American Druggist.

If you have doubts about installing a hot soda apparatus this winter, write to Dean, Foster & Co., Boston, for a circular of their low-priced apparatus and requisites, and if this does not convince you that it will be profitable to put in an apparatus at once, we are badly mistaken. The highest priced apparatus shown by this firm is the "Aetna, No. 1," which costs thirty-five dollars net, 30 days, complete with gas or oil heater ready to use. Write them for an illustrated circular.

Those of our readers who care to know something of the manufacture of wool fat and related products should address a note to the Adeps Lanæ Co., 99 Nassau street, New York, who are introducing Adeps Lanæ "N. W. K." Adeps Lanæ is referred to as a pure neutral wool fat and a perfect ointment base intended when mixed with the necessary amount of water to represent the Lanolin hydrous of the Pharmacopoeia. Send for literature and information to the Adeps Lanæ Co., 99 Nassau street, New York.

Those of our readers who have not yet tried Stearns & Gordon's Vanilla Crystals for the preparation of vanilla extract should lose no time in sending for a sample lot. Vanilla crystals are sold at \$4.50 per ounce, and in economy and flavor are said to far surpass the natural bean. Another artificial product which has met with great success since its introduction by Stearns & Gordon is Artificial Oil of Rose. Druggists who may desire to experiment with the product, can procure a sample drachm by remitting 60 cents in stamps.

Druggists who are interested in fine printing processes as applied to labels, letter heads, cards, etc., should drop a note or call on F. N. Burt at 457 and 459 Washington street, near the Lyceum Theatre, Buffalo, N. Y., and procure a copy of his little pamphlet on "Business-Bringing Printing." It contains some fine examples

of halftone work, plain and colored. The text is unusually bright and interesting. Mr. Burt would do well, however, in future editions to add the word Buffalo to his address, else the trade may think he hails from Chicago.

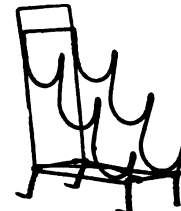
The E. L. Patch Co., manufacturing chemists and pharmacists, 91 Broad street, Boston, with branches at 96 Fulton street, New York and P. O. Box 297, Chicago, are putting up a very elegant line of sachet powders, and in their advertisement elsewhere in this issue a cut is shown of the style of container. The E. L. Patch & Co. specialties are renowned for excellence of quality, while the attractive appearance of the finished goods make them popular with both consumers and the trade. The E. L. Patch Co. manufacture a full line of pharmaceuticals and offer to send price lists and recommendations to any druggist on request.

Attention is invited to the advertisement in this issue of G. W. Meredith & Co., East Liverpool, Ohio. This firm are the proprietors of a brand of rye whiskey which has found exceptional favor at the hands of physicians, and is stocked largely by the leading druggists. This is the "Diamond Club Pure Rye Whisky." It is referred to as an incomparable tonic and stimulant, especially distilled for medicinal purposes. Druggists would do well to bear this brand in mind in ordering. It may be ordered direct from G. W. Meredith & Co. or from any of the wholesale drug firms whose names appear in the advertisement printed on another page.

Druggists who are fathers, and of course there are many such, will appreciate the advertisement of Ridge's Food which appears in this issue. Apart, however, from the striking testimonial to the intrinsic merit of the article, which is set forth in the illustration accompanying the advertisement, we would invite attention to the maker's statement regarding show cards and advertising matter. Woolrich & Co. send a fine counter assortment of advertising matter to druggists on application. Druggists who have good locations for large show cards should send a note to that effect with a request for a framed specimen. Address Woolrich & Co., manufacturers, Palmer, Mass.

The Winslow Pharmaceutical Laboratories, of which Winslow & Phillips are proprietors, are announced as successors to the business of the New York & Chicago Chemical Company, for many years the well-known manufacturers of Golden Scale Pepsin and other digestive ferments. Mr. Winslow, who is well known to the drug trade through his long connection with the New York & Chicago Chemical Company, part of the time as manager, is unusually well posted on digestive ferments, and it can be safely predicted that the former high standards of their pepsin products will be more than maintained. Messrs. Winslow & Phillips promise the retail trade some specialties soon which will be a novelty in the matter of profits.

The Philadelphia Ornamental Wire Co., of 18 N. Sixth street, Philadelphia, are introducing a useful line



of wire display stands for the drug and perfumery trade. The accompanying cut shows a neat design in toothbrush racks which can be handled by druggists at a profit. These racks are extremely popular with customers, as they are cleanly and neat in appearance. Sponge racks, bottle racks, and countless

other conveniences in wire, as made by the Philadelphia Ornamental Wire Co., figure in their new catalogue a copy of which will be mailed free to any address on request.

Fox, Fultz & Webster, manufacturers and importers of druggists' glassware and sundries, 52 Park Place, New York, and 18 Blackstone street, Boston, call attention to their Hot Soda Urns, which it is pointed out are superior to many other apparatus of this kind in fittings and arrangement. The No. 1 Hot Soda Urn, which is being extensively advertised to the trade, is finished in decorated pearl agate ware with white porcelain lining and is fitted with planished copper tumbler warmer, glass indicator, high stand and carbon oil heater or gas stove. The net price of this urn is quoted \$17.00. The No. 2 urn presents an exceptionally neat appearance. It is nickel plated and is fitted with a tumbler warmer, glass indicator, fine 2-quart decorated pitcher and a carbon oil heater or gas stove. This urn is quoted \$19.00 net. Fox, Fultz & Webster state that they are prepared to furnish any size to order at short notice, and invite druggists to send for lists and prices. Suppose you write them!

Raymond & Co., makers of Raymond's Pectoral Plasters, 62 Carrol street, Brooklyn, N. Y., call attention to another part of this issue to an exceptionally liberal offer which they are making for the purpose of proving the merit and popularity of their goods. The offer reads: "If there are no more than twenty druggists in your town, and you have not already accepted our offer and will send us your card or label and 100 selected names of your customers who have children, we will send you a half a dozen Raymond's Pectoral Plasters and come counter wrappers and advertising with your imprint to the 100 names by mail. This will introduce our goods and pay you \$1.50." Just think of it! In return for a hundred names Raymond & Co., agree to advertise your pharmacy to the entire list and present you with a supply of plasters and advertising matter free. We fancy Raymond & Co. will be kept busy during the next month fulfilling their part of the contract. Druggists should take Raymond & Co., up on this.

The fact that the public have come to regard the pharmacy as a place where only the best goods of any kind are kept, has served to make druggists extremely careful regarding the quality of goods handled. Take cigars as an example. How many smokers give the drug store cigar the preference over that of the regular cigar dealer? A great number; and simply because druggists have gained the confidence of smokers by keeping only the best brands of the different varieties. Many druggists make a specialty of the cigars of one manufacturer. Those of J. Edward Cowles & Co., for instance, are handled largely by druggists, and they seem to give uniform satisfaction. The neat glass signs which are furnished by the makers certainly help sales wonderfully. A price list which includes mention of every style, grade, shape and combination of cigars, from the lowest priced domestic article up to the finest Key West and imported goods, can be had free by addressing J. Edward Cowles & Co., 143 Chambers street.

The Sunset Limited to California.

Commencing Thursday, November 1st, the Southern Pacific Railroad will put on

a fast limited train composed of dining and sleeping cars to run from New Orleans, La., in connection with The Southern Railway "Piedmont Air Line" South-Western Limited now operated between New York and New Orleans within thirty-nine hours. This elegant train will leave New Orleans every Thursday morning at eight o'clock after arrival of the Southern.

This new schedule gives the California traveller many hours the quickest travel with complete dining and sleeping car service between New York, Los Angeles and San Francisco.

For full particulars call on or address: R. D. Carpenter, General Agent, or Alex. S. Thweatt, Eastern Passenger Agent, 271 Broadway, New York, N. Y.

A Litmus Pencil.

J. S. Tyree, 101 Massachusetts avenue, N. E., Washington, D. C., is introducing a very convenient device for use in urinary analysis and other processes where it is necessary to detect the presence of acids or alkalis. It consists of a pencil of chemically pure litmus enclosed in wood like an ordinary lead pencil. One half of the pencil is for detecting alkalis and the other half for acids, and it is claimed to be so sensitive to the action of acids and alkalis that it will detect them in any proportion, from one part in one hundred thousand upward. The instructions accompanying each pencil are to sharpen the ends as you would any pencil, dampen the litmus with the tongue or water, rub it on a strip of any kind of unglazed white paper, and insert the strip of paper in the urine or solution to be examined. If the blue end is used and the litmus turns red, acid is present; if the red end is used and the litmus turns blue, alkali is present. The maker states that he is prepared to fill all mail orders for pencils upon receipt of the price, 25 cents.

Handsome Holiday Goods.

In the show rooms of the drug trade, the fancy goods and the perfume departments are to the fore. One of the most attractive displays in the line of holiday perfumes to be found in the city is that now on exhibition in the rooms of Tarrant & Co., at Greenwich and Warren streets.

For their regular odors Messrs. Tarrant & Co. have adopted a bottle of chaste and elegant design which is quite a departure from the conventional forms, and this bottle they have in strawberry and in olive colored glass, as well as in clear flint. A very taking novelty of this season shown by them is a new shield-shaped card of most artistic design and execution which is used as a display card for a dozen trial size. Each card bears 12 bottles of the most popular odors, and makes the most attractive counter display we have seen this season. A half-tone illustration of the "Kioto" chrysanthemum panel, which is one of the handsomest, is shown in the advertisement on page 5 of this issue. This panel was designed by Messrs. Prang & Co., the well known artists.

Among the distinctly holiday novelties, the handsomest thing shown is a 20 oz., decorated Bohemian bottle, the decorations of which embrace cutting, etching, hand-painting and gold plating. This is surmounted by a cut glass stopper and is put up in a most artistic hand-painted satin-covered box, lined with padded silk. This bottle filled with toilet

water is intended to retail at about \$15.

A very pretty display is also made of four two ounce bottles of extract in a handsome hand-decorated box. This box, like all the more elaborate ones of this line, is admirably suited for use as a handkerchief or glove box, after the perfume has been removed.

Another attractive article is shown in an octagonal bottle of pyramidal shape, the alternate faces of which are etched with an elaborate floral design.

Another special design is a handsome decorated silken bag containing two bottles of perfume, and which is just the size for an opera glass bag for which purpose it is designed to be used.

A very effective form of subsidiary decoration is resorted to in the use of bows of ribbons, made of the several college colors so that any particular college can be catered to. These ribbons include the colors of all the larger colleges, the white and blue of Columbia, the pink and gray of Vassar, the crimson and black of Harvard, etc.

The boxes used for these holiday goods are all specially designed by Tarrant & Co., and are covered with silk, satin or the finest and latest designs of fancy French papers. In fact there is a dainty suggestion of that elusive quantity French "style" and of Parisian "chick" about the entire line.

A complete and artistic list of these attractive goods has been prepared which our readers should consult. A copy may be obtained by applying to Messrs. Tarrant & Co.

NOTES ON PRICES.

The Tzar's Illness and the Drug Trade.

The progress of the Tzar's illness was watched with much concern from a business as well as a private point of view by dealers in certain kinds of drugs specially used in the Russian market. One of these drugs is Siam gum benzoin, of which London is the chief trade-center, and the bulk of which is exported to Russia as an ingredient in the incense used in the celebrations of the Greek Church. When Tzar Nicholas I. died, about the close of the Crimean war, a sudden demand for Siam benzoin caused the price of the drug to advance to the highest point known in the history of the trade, and there exists to-day in the drug-museum of the London Docks warehouse at Crutched Friars a specimen of a particularly fine kind of the gum, which at that time is said to have been sold at the rate, we believe, of about \$900 per cwt. On the occasion of last week's London auction several holders of the drug brought forward supplies, which sold with a competition which justified their foresight. An unusually large consignment of the gum, which by chance had just arrived, was the subject of especial attention, and realized fully 20 per cent. above the valuations. Gum olibanum and beeswax are also articles of which the prices are likely to be affected for the same reason.—The Chemist and Druggist.

The London Cinchona Market.

At the last auction sale of cinchona bark in London the following resolution was offered and carried: "That with the decreased and decreasing interest the London bark market now offers to quinine manufacture the remaining auctions for 1894 should be held on November 13 and December 11, and that throughout 1895 they should be held not oftener than

monthly and as nearly as possible on such dates as will fall midway between the periodical Amsterdam auctions to be eventually fixed." In commenting upon the above the London "Chemist and Druggist" says: "The feeling among those connected with the London cinchona trade, especially brokers and importers, is one of general indignation at the manner in which the resolution was brought forward, and of disapproval at its wording. Although it is not denied that the present condition of the London cinchona market may render the continuation of the fortnightly auctions inadvisable, it is held that no alteration should have been made, excepting after full consideration by all the firms interested in the trade and with their general concurrence. Some months ago the question was informally raised, but on that occasion no decision was arrived at, and it is asserted that the mover of the resolution did not give any hint whatever of his intention until he asked David Howard, just before the commencement of the auctions, to second it. This action is considered exceedingly autocratic and is resented accordingly. Several importers declare that they will ignore the resolution altogether and suit themselves in the matter of auctions. Moreover, the phraseology of the resolution is freely criticized, especially that portion in which the waning importance of the London market and the rise of that of Amsterdam are gratuitously advertised."

The New York Drug Market.

In an ably presented review of the New York drug market contained in the monthly price current issued by C. H. Dietz & Company, wholesale druggists, importers and exporters of crude drugs, gums and oils, 6 Gold street, New York, it is noted that the last two months have brought quite some activity into the crude drug market and considerable changes have taken place, many of them in an upward direction. Balsam Fir, Canada, has advanced, whereas the Oregon balsam has remained rather dull with little inquiry. In Yellow Cinchona Bark, quite a scarcity is to be noted and high prices were paid for anything that looked like the article sought for, test being a secondary consideration. Cascara Sagrada is very cheap now; 4c. will buy round lots here in New York. Cascarella is also lower, some good sized shipments having reached this market. Cubebs remain dull at 18c. for the stemless and sifted. Colocynths: A good demand could be noted all during the last two months and prices, owing to short crop, have gone up from 88c to 45c for Trieste. Cuttlebone is slightly higher and should soon reach again its normal price. Ergot has remained dull and low in value, at prices ranging from 18c to 22c. Arnica flowers came out in good crop this year and are somewhat lower; we quote 8c. for a bright and select flower. German Chamomiles: We are keeping the choicest flowers only this year; the crop was an abundant one and we took advantage of the early season and secured the finest parcels offered. We can supply a real select flower that will please the trade. Gum Assafoetida: There has been all along a good demand and prices have advanced owing to a scarcity in London and Calcutta. We look for still higher prices, simply because inferior gum cannot be imported any more and the demand must be filled with higher grades, thus stimulating the demand for all Calcutta species. Prices of 40c should not be out of the question. Gum Opium is hold-

ing its price at \$2.10 (now \$2.35), somewhat weaker than a week before, when the usual reports of bad weather influenced this market and prices went up to \$2.15 and \$2.17. Narcotic Herbs have all advanced and a good article is hard to find in Europe. Belladonna brings now 9c to 11c, Henbane 8½c, and Digitalis 7½c. Coca Leaves, Truxillo: We secured a choice parcel and call consumers' attention to the same; it is of prime green color and good test; we ask 19½c. Damiana is slightly higher, 12c being asked for a good green leaf. Alex. Senna is steady in all grades, and Tinnevely has decidedly advanced, especially on jobbing grades; consumers should not look for a decline in the near future. Ipecac has created quite a stir in this market by its sudden rise to 5s. 6d. at the last London auction. Prices based upon London quotations should be \$1.40; we quote \$1.22½ to \$1.30 for prime quality. Sarsaparilla, Mexican, is very low just now; the stocks here are large, and with firm orders in hand, importers would sell at 6, possibly less. Serpentina is higher at 28c. Senega lower at 29c. Celery Seed is now quoted at 9c, on account of competition and arrivals of new seed. We advise a purchase. France will not sell at less than 9½, and 10½ should be the natural quotation.

Chemicals.

In the November prices current of Powers & Weightman, manufacturing chemists, Philadelphia, advances and declines are noted as follows: Advanced, blue pill, caffeine and its salts, citrine ointment, codeine and its salts, mercurial ointment, morphine sulphate, salicin, theine; declined, atropine and its salts, silver and its salts, sodium salicylate, thymol.

Advance in Morphine.

Powers & Weightman, and Rosengarten & Sons, manufacturing chemists, Philadelphia, in a circular under date of October 31, announce the following advances in price of morphine: Bulk @ \$1.90, 1 oz. vials @ \$1.95, ½ oz. vials in 2½ oz. \$2.15, ¼ oz. vials in 1 oz. boxes @ \$2.20. Codeine is advanced to \$3.65 in bulk, \$3.70 in 1 oz. vials, and \$3.90 in ½ oz. vials. A similar advance is noted in the salts of codeine.

Essential Oils.

The monthly price current and market report of the Sicilian Essential Oil Co., Messina, Italy, with branch office at 96 and 98 Maiden Lane, New York, is issued under date of November 8. It contains the following comment on special lines:

Lemon.—The market for this oil is very steady, and for prompt shipment there is no quotable change. New crop, December shipment, is bringing somewhat higher prices.

Orange, sweet.—New crop is now ready for shipment from Messina, and there being only a small demand, a decline has taken place.

Bergamot.—There is no change in the price for prompt shipment, but the new crop, December shipment, is quoted higher.

The Sicilian Essential Oil Company are offerings oils lemon, orange and bergamot in one and two pound original cans. The one pound package is referred to as made of polished copper with a modern device for closing. The firm state that the introduction of these original containers has been attended with gratifying success.

Wholesale Druggists' Prices.

Conforming to our usual custom we note below the more important changes which have taken place since our last report:

ANTIMONY, Sulphuret has declined 3c and is now quoted 12 @ 15c.

ASAFOETIDA is higher, with the current quotations 40 @ 45c for whole and 50 @ 55c for powdered.

CAFFEINE prices are revised in accordance with the recent advance, and we now quote the alkaloid in ¼ oz. vials, 70c per oz.; caffeine bromide, do., 85c; citrate, do., 68c; valerianate, do., 85c.

CARMINE has dropped a notch and sales of No. 40 are making at 30 @ 35c.

CREOSOTE, beechwood is lower at \$1.25 @ 2.50.

GUARANA is in better supply and prices are easier; the former quotations of \$1.25 @ 1.40 are revised to \$1.15 @ 1.25.

GUM CHICLE is lower, and 27 to 30c will buy.

GUM OPIUM is tending steadily upward and an advance of 35c is to be noted. Powdered is also higher, having advanced in the interval from \$3 @ 3.25 to \$3.50 @ 3.75.

OIL PEPPERMINT is in better supply and values are easier with \$2 @ 2.10 representing the range.

Review of the Wholesale Market.

NEW YORK, Nov. 9, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

FOR ORIGINAL PACKING PRICES SEE PAGE 25.

While the condition of trade in the several departments of drugs, dyestuffs and chemicals is not such as to call forth a general expression of satisfaction, the movement in jobbing parcels is fairly up to the average of previous years for the fall season. The market is gradually acquiring a stronger tone and it is confidently anticipated that trade will revive as soon as the political affairs of the country return to their normal conditions. Opium has improved in demand and advanced in price. Asafoetida is scarce, and values are steadily advancing. Quinine is unchanged. Menthol is weaker. Mexican sarsaparilla is firmer. Jalap is firm at the advance. Morphine and codeine have advanced. Senega root is easier. Short buchu leaves and arnica flowers are a trifle lower. Huanuco coca leaves are slightly higher. The important fluctuations are tabulated below as follows:

DECLINED.	ADVANCED.
Red Prussiate of Potash.	Caffeine.
Bicarbonate of soda.	Codeine.
Unbleached coriander seed.	Opium.
Huanuco coca leaves.	Trieste cuttle bone.
Cubeb berries.	Asafoetida.
Chamomile flowers.	Cassia buds.
Acetic acid.	Shellac.
Acetate of lime.	Brazil wax.
Short buchu leaves.	Lycopodium.
Arnica flowers.	Jalap.
	Mexican sarsaparilla.
	Gum dammar.
	Vanilla beans.

ARNICA FLOWERS have continued quiet, and moderate jobbing sales are making at the range of 8c @ 8½c.

BALSAM COPAIBA is held with increased firmness. The available supply in the hands of importers is light, and 84c @ 85c is asked for Angostura.

BALSAM FIR, Canada is offering with more freedom but prices are yet a trifle irregular. Supplies for forward delivery are offering in some instances down to the point of \$2.70 while spot goods in barrels are obtainable at \$2.90 and cans \$3. An advance over these figures is required by some holders.

BELLADONNA LEAVES are slightly firmer owing to reports advising a lessened production; prime grades quoted 11c.

BUCHU LEAVES are in moderate inquiry with current sales at the range of 7½ @ 9c. The article is reported easier abroad.

CACAO BUTTER, Foreign, to arrive is held at 82½ @ 83½c though only a limited inquiry is experienced.

CAFFEINE is exceedingly scarce and the price has been advanced in instances to \$4.10.

CASSIA BUDS are meeting with active inquiry and 19 @ 20c is asked for the small available supply.

CHAMOMILE FLOWERS continue in fairly active demand with numerous sales reported of German at the range of 13 @ 17c and prime Roman at 14c.

CODEINE is higher abroad and up to \$3.75 is now required in this market for foreign; domestic continues to offer at \$3.45 in bulk.

COD LIVER OIL, Norwegian, continues in good jobbing request and firm at \$28 @ 30 as to brand. The tone of the primary market is reported very firm.

CUTTLE BONE, Jewelers, is doing better. In instances 48c is asked for large and 40c for small; Hungarian is active in a jobbing way at 8½ and Trieste 8¼ @ 9c.

DIGITALIS LEAVES are offered more freely of late and we hear of numerous small sales at 7½ @ 9½c as to quality.

ERGOT appears to be gaining tone abroad but the market here remains very quiet at nominally unchanged prices.

HENBANE LEAVES will probably be influenced by the same conditions, but supplies are yet obtainable at 10c.

GUARANA is less firm with jobbers quoting 85 @ 87½c. From importers' hands 80c is required.

LYCOPodium continues to offer for forward shipment from Hamburg at 42½ @ 44c as to brand. The spot quotation remains 47 @ 58c as to quantity.

MATICO LEAVES are scarce and the available supply is small and closely concentrated. We hear of nothing offering below 20c.

MENTHOL offers with increased freedom and at a slightly easier price, say \$5.15.

OPIUM. Speculation in the Smyrna market for American interests has served to advance prices considerably since our last. The cables advising the appreciation in the Smyrna market read: "Sales for America. Speculators bought up to 9s. 10d. No more sellers at this price. Interior reports very unfavorable. A further material advance looked for." Upon the receipt of this intelligence prices here advanced immediately from \$2.35 to \$2.50 @ at \$2.62½. The advance has not been maintained however, and single cases are now offering at \$2.35 while jobbing quantities may be obtained upon the basis of \$2.37½ @ 2.40. While it is the opinion of a few in the trade that the present advance in prices is due to a passing "speculative effervescence" there are others who refuse to name prices in the anticipation of a further advance.

QUININE continues in steady fair jobbing inquiry and the market is firm at 24½

@ 24½c for foreign, as to brand, from second hands. The market appears firm in tone and holders appear to manifest no disposition to urge sales at concessions from established prices.

SENNA LEAVES continue in active jobbing demand at the range of 5 @ 18c as to quality for Tinnivelly.

VANILLA BEANS continue in good jobbing request at well sustained prices. A scarcity is anticipated before the new crop comes to hand next year and the indications are that prices will be firmly maintained for some time to come. We quote whole \$7 @ 18 and cut \$5.50 @ 6.

DYESTUFFS.

CUTCH continues in moderate consumptive demand and steady at 4½ @ 5c for inferior grades of bale, 5½ @ 6c for prime, 6 @ 6½c for block in boxes, 6½ @ 7c for ordinary slab and 8½c for M. M.

GAMBIER is maintained in steady position with store goods held and selling moderately at 4½ @ 4c.

GALLS, Blue Aleppo, are quiet but steady at 18 @ 18½c.

CHEMICALS.

ALUM in a jobbing way is held at \$1.65 and \$1.75 for lump and ground, but these values it is said can be shaded upon round lots.

ACETIC ACID, commercial, is lower the decline being attributed to the heavy stocks of wood possessed necessitating immediate consumption of same to avoid absolute loss. Quoted 1½ @ 1½c.

BLEACHING POWDER, English, is selling upon spot at 1½ @ 2c. Contracts for this month's shipment can be closed at 1½ @ 1½c. German on spot is selling at 1½c.

BLUE VITRIOL is held and selling moderately at the previous range of 3¼ @ 3½c.

BICARBONATE OF SODA, English, offers quite freely for forward delivery, and in instances down to 1½c is named f. o. b. Domestic is held and selling at the range of 2 @ 2½c as to make.

CARBONATE OF AMMONIA is in good request and firm at 1½c.

CHLORATE OF POTASH is slightly firmer, though sales are reported of German upon the basis of 10¼c.

CREAM TARTAR is in good request at the range of 17½ @ 18c for crystals and powdered.

ETHERS are lower, the manufacturers having reduced the price of sulphuric (U. S. P.) to 59c, washed 63c and concentrated 66c.

HYPOSULPHITE OF SODA is quoted \$1.65 @ 1.75, but contracts for forward delivery are reported down to \$1.52½ @ 1.55.

NITRATE OF SODA is in better position, and we hear of no sales making at less than \$2.10 @ 2.12½ on the spot.

OXALIC ACID is selling freely at the range of 7¼ @ 7½c for German and English respectively.

QUICKSILVER is jobbing fairly. The demand is met at 51c.

SAL SODA, English, is held at 70 @ 75c and domestic at 72½ @ 75c.

TARTARIC ACID continues in fair, steady request and prices are well sustained upon the basis of 22½ @ 23c for crystals and powders respectively.

TIN CRYSTALS are lower in sympathy with the metal. Barrels now quoted 12c and kegs 12¼c.

ESSENTIAL OILS.

AINSE continues firm at the recent advance, and though small lots are obtainable in instances at \$2.35, the general asking price is \$2.37½.

BLACK BIRCH is in better inquiry with the current sales at \$1.45.

CASSIA is in moderate inquiry and steady at the range of \$1.20 @ 1.25.

CUBEB is weaker though not quotably lower; sales at \$1.20 @ 1.25.

ERIGERON is easier with holders quoting 80c.

NUTMEG, Native, is meeting with only a limited inquiry and the price has been reduced to \$1.50.

PEPPERMINT, H. G. H., continues in fairly active demand at \$2.25. For bulk there is a moderate jobbing inquiry with holders quoting \$1.60 @ 1.75 as to quality and quantity.

GUMS.

ALOES continues in fair active inquiry with Cape selling at 5 @ 6c, Curacao 2½ @ 3c and Socotrine at 22 @ 26c.

ASAFOETIDA has developed a remarkable scarcity and with the small available stock is closely concentrated with the result that prices have advanced materially since our last. Prime is quoted 35 @ 40c, common 24c and powdered 24 @ 25c.

ARABIC continues in satisfactory jobbing inquiry and prices are fairly well sustained at the range of 14 @ 15c for sorts.

CHICLE continues dull and now offers at the range of 24c @ 24½c.

DAMMAR is reported scarce and firmer with 19c quoted for Batavia in jobbing lots.

OLIBAUM has met with some inquiry during the interval and we hear of one sale of 1,000 lbs. at 4½c.

SENEGAL is strengthening and a firmer feeling is reported abroad though prices here are quotably unchanged.

SHELLAC is maintained in steady position but the requirements of consumers are extremely limited at the moment and speculative interest is entirely absent. Prices are firm upon the basis of 88 @ 40c for D. C. and 85 @ 40c for V. S. O.

TRAGACANTH, Aleppo, continues held in strong position but prices are unchanged at the previous range of 80 @ 62c. Turkey is in moderate request with the sales at 40 @ 70c.

ROOTS.

GINGER, Jamaica, continues in active request with unbleached quoted 12 @ 14c, and bleached 15 @ 17c.

IPECAC continues held in firm position with \$1.20 @ 1.25 asked for best grades.

JALAP is steady and in moderate request at 24 @ 26c.

SENEGA remains quiet, with holders quoting 30 @ 31c. The last quotation from the west indicated a coarse lay down of 27 @ 28c.

SARSAPARILLA, Mexican, is jobbing slowly at the range of 6½ @ 6¾c.

SNAKE, Texas, prime quality, continues scarce and firm at 80c. Inferior grades are obtainable down to 20c.

SEEDS.

CORIANDER, unbleached, offers in instances down to 8c. The stock of bleached appears under good control and is maintained at 9c.

Other lines are without important change.

Pen Pictures of Proprietary Men.

The New York Times of Sunday, October 14, contains a series of brightly-written sketches concerning prominent proprietary medicine men. The author of the article is Paul Latske, a clever New York journalist who was assisted in his work by a representative of the American Druggist.

The article was illustrated with portraits of such widely known personages as Dr. Frederick Humphreys, of New York, E. A. Bigelow, of J. C. Ayer & Co., Lowell, Mass.; C. I. Hood, Lowell, Mass.; Thos. Doliber, of the Goodale Company, Boston, Mass.; Chas. H. Pinkham, of the Lydia E. Pinkham Medicine Company, Lynn, Mass.; Alfred B. Scott, of Scott & Bowne, New York; Brent Good, of the Carter Medicine Company, New York; Dr. Ray V. Pierce, of the World's Dispensary Medical Association, Buffalo, N. Y.; Ed. G. Wells, of the Chas. N. Crittenton Company, New York; Dr. John Radway, of Radway & Co., New York; Alfred H. Mason, of Seabury & Johnson, New York; George T. Fulford, of the Dr. Williams Medicine Company, Brockville, Ont., Canada; Thos. F. Main, of Tarrant & Co., New York, and H. H. Warner, of H. H. Warner & Co., of Rochester, N. Y.

Alfred B. Scott.

Concerning Alfred B. Scott, who is the new president of the Association of Manufacturers and Dealers in Proprietary Articles, the writer notes that less than twenty years ago he was working for a very modest salary. In 1876 Mr. Scott, who was a farmer's boy, went into partnership with Samuel W. Bowne. They started in a small way to manufacture an emulsion of cod liver oil.

They brought their product before the physicians of New York and then introduced it into other cities. Branch factories were established, after awhile, in Barcelona, Spain; Oporto, Portugal; Milan, Italy, and in Paris.

Step by step the business has grown up until it touches every corner of the globe. Even Japan has received the emulsion gratefully, and John Chinaman is taking it. The firm recently received sets of photographs, showing their workers in the Orient—natives in the gayest of costumes, who go through the streets of cities distributing circulars, pictures, and all sorts of "matter" put into the tongues of the East.

Last spring Scott & Bowne moved into a magnificent building of eleven stories, which they erected at the corner of Rose and Pearl streets. On the rear wall of this building, facing the Brooklyn Bridge, was painted, in herculean size, the picture of the Norwegian fisherman with a great cod on his shoulder, the trade mark of the emulsion. The story of this trade mark is interesting.

SCOTT'S EMULSION "TRADE MARK."

The history of the trade mark adopted by Scott & Bowne is told as follows:

Some ten years ago Mr. Scott was seated in the office of the American Consul at one of the little seaport towns of Norway, looking into the details of the oil product of that country. Word suddenly came in that the largest codfish ever caught in the vicinity was outside. Mr. Scott went to view this extraordinary "catch." He saw a bronzed Norwegian bending over under the weight of a cod. A local photographer was immediately hunted up and a picture secured. The trade mark of the emulsion is an exact reproduction of this photograph. Mr. Scott kept the picture some time as a memento. Its appropriateness, from the

The preparation by 1862 had acquired quite an extensive sale among doctors and then Mr. Tarrant began in a small way to advertise it. He died in 1866, a bachelor, and his brother John succeeded to the business. He, too, died, leaving the business to James Tarrant's old clerks, who formed a corporation, which is now one of the largest wholesale drug houses of the country. The old building was torn down and a fine modern structure was erected on its site, where "Tarrant's Pharmacy" still has the main corner, filling prescriptions, as it did sixty years ago, for the residents in the first ward. business point of view, struck him, and ever since it has been used all over the world.

Thomas Doliber.

THE FIRST MELLIN'S FOOD BABY.

Mr. Doliber himself is the finest kind of an example of what pluck and perseverance will do in this country. By his individual efforts, his keen business instinct, and his brilliancy as an advertiser he has made the reputation of "Mellin's Food" as broad as the land. It was he who first conceived the idea of showing "Mellin's Food Babies" as the best sort of an advertisement, and in this connection it is interesting to know that the original "Mellin's Food" baby is now a strapping college student of twenty-one, at Harvard.

HOW IT ORIGINATED.

"The way of it was this," said Mr. Doliber. "While I was with Theodore Metcalf & Co., a lady, one of our best customers, came into the store one day and said she wanted us to put up some 'Mellin's Food' for her. It was an English preparation, discovered by Gustav Mellin of London, who had worked it out on the principles advanced by Liebig. The lady, who is still alive and living in Boston, had had it prescribed for her sick baby while she was over in London. "On her return she brought over with her what she thought would be a sufficient quantity. But her supply gave out, and then she came to us. There was none in this country; in fact, no one in America knew anything about it. But the lady, who was rich, said she must have it without delay, and instructed us to cable for it.

AN AMERICAN AGENCY.

"This was in 1874. Our order came, and we got such good reports from it that we sent for more. The sale increased so rapidly that in 1876 I went to London and made a contract with Mr. Mellin for the exclusive American agency, and afterward I bought his formula and the exclusive right to manufacture it over here. In 1883 I withdrew from the house of Metcalf & Co., and formed the Doliber-Goodale Company, and went into the manufacture of the food, devoting all my time to pushing its sale. Mr. Goodale went out of the firm some time ago, but we have always kept the company name.

"The first picture of 'A Mellin's Food Baby' ever published was used by me without first asking the permission of the mother who had sent it to us with a letter saying how much good the use of the food had done her baby. I was pretty nervous over the possible consequences until I received a letter from the baby's mother, in which she did not conceal the fact that she was tickled over the reproduction of her baby's photograph.

"Since then we have received thousands and thousands of pictures, but we never take the chance of publishing any now without first getting permission.

Mr. Doliber himself looks as if he had been a "Mellin's Food Baby." He is the picture of good health. He has a round, full face, adorned by side whiskers, which are beginning to show gray. A pair of shrewd eyes sparkle good-naturedly behind gold-rimmed spectacles. He is not very tall, but his proportions attest that he is accustomed to good living.

He was born at Marblehead, Mass., fifty-seven years ago, and was apprenticed to a druggist in that place. Afterward he went to Boston, and found employment in the Metcalf establishment.

He was the youngest boy in the place, but within eight years he had been admitted to the firm.

G. T. Fulford.

The owner of "Dr. Williams' Pink Pills for Pale People" is a handsome, bright-faced Canadian of forty-two, and there was no one at the convention of the N. W. D. A. who could tell a funnier story or talk business more rapidly.

Mr. Fulford, until 1888, was a retail druggist in Brockville, Canada. He had made \$75,000 in his business, and concluded, as he himself puts it, that with that sum he could create a field for a "tonic pill"—something that had no rival. So he started in with his "Pink Pills for Pale People."

He began operations in Canada, and then came to the United States.

"I made up my mind to make a spoon or spoil a horn," said Mr. Fulford in telling the story. "I've made the spoon, I think. The pills and the name took. I wanted to get at people who needed a tonic—pale people—hence the name.



G. T. FULFORD.

Mr. Fulford is now spending about \$500,000 a year in advertising. In 1891 he went to England and began telling the Britishers about his "Pink Pills" in one and two column advertisements of solid reading matter. He was warned that he would bankrupt himself, but he hasn't and he goes to Paris to tackle the Frenchmen on Nov. 3. His main place of manufacture is now situated at Schenectady, N. Y.

For the portrait of Mr. Fulford we are indebted to the Fourth Estate.

Tarrant & Co.

James Tarrant conducted an up-town drug store in this city in 1834, at the corner of Warren and Greenwich streets. At that time the New York Hospital was "out in the country," on Duane street. At the suggestion of the doctors in this institution, James Tarrant began, in 1844, to make a "seltzer aperient" for them. The foreign waters that came over in sailing ships, were flat and lifeless when they arrived, and Mr. Tarrant was told that his preparation would be substituted, if he got up the right kind.

"Tarrant's Seltzer Aperient" was advertised everywhere when the corporation was formed, and there is probably not a newspaper reader in the country who has not at one time or another seen the peculiarly shaped advertisement, which was first designed by Henry M. Billings, now retired, one of the old clerks, who has an interest in the house.

The present head of Tarrant & Co. is Thomas F. Main, who came from England about thirty years ago and entered the concern in 1869 as junior clerk. Mr. Main was elected president of the National Wholesale Druggists' Association, at the New York meeting convention.

Hood and That "Tired Feeling."

C. I. Hood is one of the most interesting men in America. His great advertising line, "For That Tired Feeling, Take Hood's," has come into national fame.

Men who have made a life-long study of advertising all agree that it is as hard to find a great catch line as it is to discover a new country, and almost as profitable. A fortune awaits any man who will equal "that tired feeling."

HOW THE PHRASE ORIGINATED.

"The way I happened to hit that phrase was very simple," said Mr. Hood. "A lady came into my drug store at Lowell one day in the Springtime, and said she wanted a bottle of my sarsaparilla. She added: 'I have that extreme tired feeling, and I think the sarsaparilla will help me.' It struck me at once that 'that extreme tired feeling' would make a great line. But it was a little too long, and though 'extreme' was a splendid word where it occurs, I had to sacrifice it."

BEGAN LIFE WITHOUT A DOLLAR.

Mr. Hood started out in life without a dollar, and when fourteen years old he was employed in a drug store in Lowell. But here the field was too small for him and he went to Boston, where he found employment in Theodore Metcalf & Co.'s establishment, the greatest retail drug store in that city.

"I made up my mind I'd be a partner in that house," said Mr. Hood, in telling of his experiences, "and I would have succeeded except for the fact that my health broke down. I had to go back to the farm at home. Afterward I tried it again, but the work was too much for me, and I accepted an offer to go into partnership with a Lowell man who offered to put up the capital for a drug store if I would supply the experience. My partner did not treat me right, but when I protested he coolly told me if I did not like it I could go, after having worked three years to build up the business. Well, I did not propose to throw away three years' work that way, so I held on, waiting for my opportunity. It came three years later.

Our landlord was J. C. Ayer. My partner was interested with him in several enterprises, over one of which they quarreled. Mr. Ayer came to me, thereupon, and offered me the lease of our store. We were only tenants at will, and he said he would let me have the place if I wanted it. That was my chance. By the manner in which he had treated me, my partner had forfeited all consideration at my hands. I told him about the offer, borrowed some money, and bought him out.

"Even before our separation I had started in to make 'Hood's Sarsaparilla,' for sale over the counter, and I had proposed to my partner to spend \$300 for advertising. He was frightened almost to death. He demanded to know where I could sell \$300 worth of the sarsaparilla, and I said nothing more about it. But

after I had things to myself, I carried out my advertising idea in a small way. The sarsaparilla end of the business grew until I took one of my clerks as partner in the drug store, and devoted most of my time to the sarsaparilla."

When Mr. Hood started in in Lowell, after his illness, he was several hundred dollars in debt. Now nobody knows how rich he is, but all his friends believe him to be a millionaire, and he carries \$250,000 worth of life insurance. He sold out his drug store long ago to his former clerk. His plant at Lowell employs 700 people. His winter home is in Lowell, where, as on his farm, he dispenses a generous hospitality. He has no children.

A. E. Richardson.

"Paine's Celery Compound" was represented at the convention by a substantially-built man who said he was fifty years old, but who looked to be about forty. He was A. E. Richardson, of Wells, Richardson & Co., Burlington, Vt. Mr. Richardson has charge of the proprietary end of his firm's business, and draws checks every year for about \$600,000 worth of advertising. He looks more like a prosperous banker or merchant than a "hustling" advertiser, but he has managed to push his house to the very front rank.

"We took hold of Paine's Celery Compound a few years ago," said Mr. Richardson. "Our house is in the drug jobbing trade in Burlington, and one of our customers, a local druggist named Paine, had been selling the preparation early in the sixties. It was a formula used by Prof. Phelps, of Dartmouth, one of the founders of the University of Vermont. The medicine first became well known among the Vermont troops in the Army of the Potomac, where Prof. Phelps was Brigade Surgeon. Paine got so many requests for the medicine that he put it up in bulk to save trouble. The local reputation induced us to secure the formula when Paine died, and we proceeded at once to advertise it."

W. A. Gilligan.

A remarkably tall, slim young man, of English appearance, was pointed out to the laymen who peeped in at the convention as the "representative of Liebig's extract." His name was registered as W. A. Gilligan. To a reporter, Mr. Gilligan gave a brief sketch of how Liebig's Beef Extract was introduced.

"Our headquarters are in London," said Mr. Gilligan. "Our chief warehouse depot is at Antwerp, and our factory is in Uruguay. C. E. Gunther is the head of the company—the managing director. Baron Liebig had a long struggle to get recognition of his ideas, and it was not until Cornell, David & Co. of London formed a company, backed by English and Antwerp capital, that the mercantile success of the preparation became possible. The first year only 10,000 pounds were sold. Last year the sales reached 1,250,000 pounds.

"Liebig came to make experiments because he realized that the vile tea the poor people of London were drinking was causing a great deal of ill health, and he concluded to put a meat substitute within their reach."

The Condition of Trade.

The following interviews with members of the National Wholesale Druggists' Association were obtained by a representative of the "American Druggist" on the business situation of the country.

KANSAS.

Frank A. Faxon, of Woodward, Faxon & Co., Kansas City, ex-president of the

association, Kansas City, states he is doing a fine business at present, there being a marked improvement over last year. "The tariff settlement has had something to do with this, but not everything. We are receiving to-day the largest shipments of live stock ever known. Every day about \$250,000 is paid out for these shipments, and most of this money goes into circulation with us in the city, helping to make times easy all around. Last year these shipments may have been almost as large, but somehow money was tighter, and we all felt the pinch of the bad times. As it is, the improvement is steady and felt by every one."

J. C. Fox, of McPike & Fox, Atchison, Kan.—Our business is picking up somewhat. I do not expect the improvement to be so marked as in other sections, because of the loss of our corn crop. In the western part of Kansas corn has almost been wiped out. In Nebraska, too, the crop has been a failure.

The Tariff bill is not satisfactory to anybody, but so long as the question is settled for the time it is an improvement.

In the main the outlook in Kansas is hopeful. We cannot expect very bright and prosperous times until we have another good crop. In the eastern part of the State the corn crop escaped without injury, and the higher prices caused by the failure in the other sections compensate somewhat for the loss. Decidedly business is better than last year. Collections are keeping up remarkably well.

In the western part of Kansas a good many people have gone away from the State, deserting their farms, but in the eastern part the farmers are very well contented where they are. Business will rapidly adjust itself to the new tariff.

MAINE.

John W. Perkins of Portland, Me.—Maine has not at any time suffered as much as other States from the bad times. Trade is now fully equal to what it was two years ago.

The tariff settlement has given a better feeling. Money is easy with us. The banks have plenty and are willing to lend.

MICHIGAN.

Alanson S. Brooks, of Williams, Davis, Brooks & Co., Detroit, Mich., manufacturers of the "Dabrooks" perfumes, said: "The business outlook is very encouraging. Within the last three or four weeks there has been a most pronounced improvement, and even before that business was much better than during the same period last year. We are large manufacturers of perfumes, and the sales in this line always indicate very clearly the state of the country.

"When people have no money to spend the sales of perfumes at once fall off. The revival of good times brings a corresponding increase. It is very significant, therefore, that our sales of perfumes have increased almost 100 per cent. over last year.

"The settlement of the tariff uncertainty has, to my mind, had most to do with the reawakening of business. Collections are not particularly brisk our way except in the large centers. There is apparently no lack of money, and it is easy enough to borrow; but it has not yet reached the small towns in the new circulation which has set in.

"As soon as the crops begin to move and the farmers are paid, the small towns will be as flush of cash as the big cities

are to-day. We have no trouble at all in collecting from jobbers, who are, of course, all located in banking centers."

COLORADO.

William A. Hover, of W. A. Hover & Co., Denver, Col.—"In spite of the allegations of some of our public men, made for reasons of their own, the general business outlook in Colorado is first-rate. Business credits have never been better. We have never had a time when so many of our customers discounted their bills."

"The statistics of 1894 will show, I think, that the blow at silver has not been an unmitigated evil to Colorado. It has stimulated gold production in the State, our production of gold being second only to that of California. Except for the strike at Cripple Creek, our chief gold producing point, and the strikes at other points, our gold production would even have led California. Yet, for all our gold production we are still firm silver men. We feel certain that silver will get justice sooner or later. It is only a matter of education with you people here in the East, and we mean to be your educators."

"The statement of the tariff question has had little to do with our good times in Colorado in my opinion. We were not much affected by it. It is hard to say what has caused the good times out our way, but I know there has been a decided lift, and we all feel very well contented at the prospect."

TENNESSEE.

Col. Phillips, of Berry, Demoville & Co., Nashville, Tenn.—"Our crops of wheat and corn are as good as any we have known in a great number of years. In a few small spots they have been damaged by the drought, but on the whole they are abundant, and the farmers rejoice."

"The condition of the outh to-day is better than ever before. The farmers have learned to diversify their crops, and they are reaping the advantage."

"In mercantile business, times are a little better than they were last year. At present, however, the improvement is rather spasmodic. Business comes in waves, but it is bound to come with a steady volume as soon as our farmers send their crops to market. At present, they are holding them back in order to determine whether they shall market their corn and feed their wheat, or vice versa. They want to get every cent out of their products, and will wait to learn which crop commands the most money in the market."

"Money in the meantime is pretty close with us. There is lots of it in the banks, but it is hard to get it into circulation. But there is this difference over last year—the holders of money in the East are willing to let go if they see a good opportunity for investment. The tariff settlement has had much to do with this, perhaps, but the tariff is a local issue, to my mind, and in our State the improvement has only been remotely affected by it."

INDIANA.

Evan F. Lilly, of Ely, Lilly & Co., Indianapolis.—"Our business is in a healthier condition than for years past. Our jobbers are more prosperous."

"Payments are better and credits are better. Local causes are mainly responsible for our good times. We are now in the heart of the natural gas district, and fuel for manufacturing and domestic purposes is cheaper in Indian-

apolis than in any large city in the country. The recent coal strikes, which caused so many manufacturing concerns elsewhere to shut down, caused a "boom" with us. Some of our manufacturers who had shut down opened up at once, to take advantage of the cheap and abundant fuel, and new manufacturers came in from other districts, where they had been hampered by the scarcity in coal. Not one of our banks had to issue Clearing House certificates. They had plenty of money to pay over the counter for all demands."

"You see, we had a severe panic in 1870, and that taught us conservatism. We were prepared for the bad times, which played much havoc in other parts of the country."

"Since the tariff passed, our manufacturers have felt pretty easy, and the settlement of the question has, of course, helped matters along. Then, too, our crops have been fine and our farmers, like the rest of our people are prosperous."

KENTUCKY.

Cary Peter of Arthur Peter & Co., Louisville.—"Business has been dull, but is looking up. During the last sixty days it has been very good."

"The South is in fine shape. The crops are splendid. In our own State of Kentucky they have never been better. The Southern farmer this year has raised his own provisions. Heretofore he had to buy them, devoting himself to one crop."

"The tariff has had something to do with the improvement, of course. The removal of the uncertainty has had a good effect. I think that if all the members of Congress were to die off times would be still better. They kept us dangling in the air until it looked as if business would be ruined. The actual harm done was magnified by the imagination of the people."

"The new prosperity in the South is built on a substantial foundation, and cannot be affected by artificial conditions. We look forward to continued good times."

ILLINOIS.

Thomas Lord of Lord, Owen & Co., Chicago.—"We, in Chicago, did not suffer as much at any time from the general depression as was the case in other parts of the country. This was due, no doubt, to the World's Fair."

"But it is a strange thing, that may or may not be accounted for by the tariff settlement, that business at present is keeping up even better than it did during the fair. Now that the tariff is fixed, I don't look upon the matter as being people know what they are doing. Still, definitely settled, and I look for renewed agitation in the future."

TEXAS.

C. A. Rucker of the Swift Specific Co., Atlanta, Ga., who has spent the past six weeks in Texas says the condition of business throughout Texas is more encouraging this year than for many years back. The cotton crop was 50 per cent. larger than for two years previous, the yield being now estimated at two and one-half million bales which represents practically one-sixth of the world's product. The crops of corn and wheat are also above the average as a result of plentiful rains during the season. Complaint is made in some quarters that the boll worm is playing havoc with the new crop of cotton, but the trouble is confined to a few sections only and no general annoyance is experienced. The outlook for a good fall and spring business was never

better and convincing proof of this is found in the large number of traveling salesmen to be found in the State. While we experienced difficulty last year in making collections the same conditions no longer exist as money is easier and payments are being made with noticeable promptness. The tariff has had no influence on the business revival; we attribute the better business conditions to the favorable weather during the season.

Diphtheria Antitoxine Solutions.

Lehn & Fink, wholesale druggists and manufacturing chemists, 128 William street, New York, have issued a circular of information concerning the new diphtheria and antitoxins, as follows:

Many physicians apply to us for information concerning the new diphtheria antitoxine remedies; supposing that a clear and terse explanation will interest all, we take pleasure in supplying the following facts:

There are three diphtheria antitoxines now in the market: Behring's, Aronson's and Roux's.

The Behring's solution is supplied of three strengths, designated Nos. 1, 2 and 3. The No. 1 is recommended in treatment of diphtheria in children under ten years of age if seen on the first, second or third day; and for all incipient cases; advanced cases require repeated injections of the No. 1 solution or equivalent single injections of No. 2 or 3. The injections should be made with the well-known Koch syringe, and preferably under the ribs, in the loins or the inner surface of the thighs.

This antitoxine is perfectly innocuous. It induces no local or general disturbance. A vial of No. 1 contains 10 ccm., which is equal to 600 antitoxine normals, and is sufficient for one case. No. 2 contains the equivalent of about 1000 antitoxine normals. No. 3 contains 1500 antitoxine normals. The dose to be injected as a prophylactic to persons liable to be exposed to diphtheria is set down by Behring at 60 antitoxine normals, or one-tenth the contents of a vial of No. 1; after infection, that is, during the incubation stage, he believes that 150 antitoxine normals ought to avert the development of the disease.

The solution should be protected from light, and stored in a cool place; with proper care the solution will keep well for several months. The addition of 0.5 per cent. carbolic acid will prevent change of the solution through micro-organisms.

Supplies of No. 1 and 2 of this antitoxine solution are under way in consecutive instalments, the first instalment having arrived in New York October 22nd, and we expect more at frequent intervals.

Roux's is prepared in the Pasteur institute of Paris, and was introduced to the attention of the medical profession through a detailed medical report by the author before the late Hygienic Congress at Buda-Pesth. This product is presumably identical with Behring's. It is not yet obtainable here, and we do not know how soon it will be available, since all the product manufactured is apparently reserved for use in France at present.

President Casimir-Perrier visited the Pasteur Institute in Paris October 23rd, and conferred upon Dr. Roux the cross of Commander of the Legion of Honor. In replying Dr. Roux praised the German bacteriologists, Behring and Loeffler, whom he credited with being the real discoverers of the new remedies. This confirms the identity of the Behring's

and Roux's products, and the latter will presumably therefore not be sold in the United States.

Aronson's is made by Schering, of Berlin, and was the first of the three actually supplied in this country. Stock was available in New York in September, but the same was exhausted in the first week of October. Additional supplies may come within a week or two. This preparation is of one strength only, and is supplied in 2 gramme vials and in 5 gramme vials. This Aronson's Antitoxine Solution, it is stated, will assure immunity against diphtheria in children and adults by injection from $\frac{1}{4}$ to 1 ccm. The application is made by a single injection by means of a sterilized syringe, and 1 ccm. is sufficient for children and adults, while $\frac{1}{2}$ ccm. will suffice for small children. In advanced cases the doses are repeated once or twice. In Germany public collections are being made, through the press, for the purpose of buying this remedy, and supplying it free for the treatment of the poor.

"A Penny."

The Humphreys' Medicine Company, of New York City announce that they will send to any dealer carrying Humphreys' Specifics or Humphreys' Witch Hazel Oil in stock, a useful sign and a very handsome assortment of printed matter, with the dealer's card, free of expense, so that

if the dealer has not advertising matter for these preparations in the store, it is his own fault, for it costs but "a penny" postal card to get a supply.

A Fine Price List.

Sharp & Dohme, manufacturing chemists, Baltimore, with general offices at 41 John Street, New York and a Western branch at 221 Randolph Street, Chicago, have published a very complete and attractive catalogue and price list of their chemical and pharmaceutical preparations. It contains the names of all the official and other standard fluid extracts, and the number of useful formulas for the preparation of infusions, decoctions and tinctures from fluid extracts. Formulas are also printed for a great variety of pills, compressed tablets, tablet triturates, lozenges and elixirs. The list is exceptionally complete. It includes an alphabetical list of botanical and official names and their English synonyms as used to designate fluid extracts, pressed herbs, etc., and a table of equivalents of metric and apothecary's measure. Illustrations are shown of pill containers, capsules, hypodermic outfits and pocket cases. The quotations in the list are subject to the usual trade discount, except where specially stated to the contrary. Retail druggists will find the list a useful one for reference.

An Attractive Novelty.

Hammond & Jones, druggists' printing and specialties, 112 East German street, Baltimore, Md., say that millions of packages of Headache Powders have been sold in different parts of the country, and it may be stated truthfully that the business is only fairly begun. They do not need to be talked up over the counter—the problem is how to display them to the best advantage, for they sell on sight if presented in an attractive shape. The usual method of "bunching" the envelopes and attaching to cards by means of rubber bands, strings, etc., is clumsy and antiquated, to say the least. The modern method is to use Jones' "Perfection" Display Card and Holder. This, they say, is an invention of W. F. Jones, of the firm, and embodies almost every element of attractiveness, simplicity and convenience that could be desired. Particulars regarding the new display card and holder can be had by addressing Hammond & Jones, at 112 East German street, Baltimore.

Readers who are pleased with the artistic effect of a neatly labeled shop bottle should send for a sample of Dr. R. R. Lansing's new glassine labels. Samples and catalogue can be obtained by addressing Dr. R. R. Lansing, 289 Jefferson avenue, Detroit, Mich., if the American Druggist is mentioned at the time of writing.

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Respectfully yours,
PROF. F. E. JACOBY,
Waterbury, Conn.

NOTE.—The above cut was made from a photograph of Prof Jacoby while performing on a tight rope: He is balancing entirely on his artificial leg, his natural foot is off the rope and is in the act of passing forward to take the next step.

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Rowe's Automatic Hot Soda Apparatus.

L. L. Rowe, manufacturer of Rowe's Automatic Hot Soda Apparatus, 18 Howard street, Boston, are meeting with encouraging success in the sale of their No. 1 Octagon apparatus. It is an attractive hot soda fountain of neat appearance which is designed to stand on the counter with the automatic boiler attachment inside. The clean and finished appearance of the tile panels which grace the sides of the octagon makes the apparatus one peculiarly fitted for display purposes. The automatic arrangement of the boiler provides for a constant supply of water heated to the exact temperature required. Write for a copy of L. L. Rowe's illustrated circular, giving particulars of the various designs.

A Artistic Catalogue.

The American Printing House, 1019 Cherry Street, Philadelphia, issues a very handsome catalogue of designs in druggists' embossing, printing, lithographing, designing, engraving, etc. Druggists who cultivate a refined class of customers know how necessary it is to present their wares in artistic dressing and to these the catalogue is especially addressed. Specimens are shown of embossed seals, cork tops, stock labels, comb envelopes, satchel envelopes, seldits envelopes, prescription envelopes, business envelopes, statements, cards, etc. The catalogue is one of the finest ever sent out to the trade and every druggist should procure a copy. It will prove an educator.

The Ohio food commissioner, gathered in among others one druggist for selling an "unfermented wine" that contained an antiseptic and 15 per cent. of alcohol, and another for selling "Dr. Welch's Grape Juice," which, though found free from alcohol and all adulteration had nothing on the label to show that it contained an antiseptic. We learn that Dr. Welch's grape juice is put up with and without antiseptics, and that the sample analyzed contained one-seventieth of one per cent. It is pleasing to note that even the enemies of so good a thing as Dr. Welch's grape juice find nothing in it to condemn. Physicians of repute, who are careful what they tie to, have expressed their confidence and approved of the juice with the antiseptic, but those desiring it without can have it. In either case it is the same pure, fresh, nourishing grape juice. The Welch Grape Juice Company are reliable, and they will meet the Ohio law with the desirable label, or those wishing it can have the juice without an antiseptic.

Hydrogen Dioxide.

Our readers will note that the Oakland Chemical Company of New York, have adopted the U. S. P. title for their Oakland Hydrogen Dioxide. Notwithstanding the fact that some manufacturing chemists have succeeded to some extent in popularizing the name "peroxide of hydrogen," it is nevertheless a matter of common knowledge that the leading physicians and chemists insist on calling H_2O_2 by its legitimate name, Hydrogen Dioxide. In view of this the Oakland Chemical Company have arranged that their product will be known hereafter as

Oakland Hydrogen Dioxide. A monograph containing much useful information regarding the exhibition of hydrogen dioxide, together with a sample of the Oakland Chemical Company's product can be obtained by any druggist who makes the request and sends 15 cents to defray the cost of expressage.

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"Well bought is half sold" Read the "trade notes" and market notes in every issue.

:O:

Of Interest to the Rising Generation.

Your journal has been exceedingly satisfactory, and contains much that is of interest to all pharmacists and especially to the rising generation. We wish you success, and if the marked improvement of the past year is as great in the future, you certainly deserve the indorsement of every lover of pharmaceutical literature.

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THE SALE OF PROPRIETARY POISONS.

The arrest on the fifteenth instant in New York city of (Gilbert M. Richardson, President, and Michael Keely, Vice-President of the Costar Rat and Roach Exterminator Co., on a criminal charge of manslaughter for selling a poisonous article as harmless, is of much importance and interest to retail druggists, to wholesalers, and to manufacturers of proprietary pharmaceutical preparations.

The facts as reported are that a Mrs. Linahan purchased from a druggist in Yonkers, a box of the "Rat and Roach Exterminator," which is supposed to have been manufactured by the company named. In the absence of Mrs. Linahan her two small children took some of the rat exterminator which had been left on the table near them. Both children died, it is alleged, from the taking of the preparation. In the wrapper around the packages it is stated that the article is perfectly harmless to the human family, and that no danger may be apprehended from using the exterminator freely, that it is free from poisons, and not dangerous to use.

The Coroner before whom the case came sent part of the preparation to a chemist for analysis, and he is stated to have been satisfied that it was a deadly poison.

Owing to the interesting nature of the case we have obtained a legal opinion upon certain aspects which it presents and this opinion prepared by Henry E. Brundage, Esq., Lecturer on Pharmacy Law at the Brooklyn College, we present herewith:

NEGLIGENCE. So highly does the law value human life, that it admits of no justification wherever life has been lost, and the carelessness or negligence of some person has contributed to the death of another (Regina and Swindall, 2 Car. and Kiv. 232-3.) And this rule applies not only when the death of one is occasioned by the negligent act of another, but where it is caused by the negligent omission of a duty of that other (2 Car. and Kiv. 368, 371.) Thus we see that a person may be criminally liable by reason of a remote party inferred when he might not be civilly liable to answer in damages to such a party. Criminal liability arises out of the interest which the State or people have in their own protection and welfare, and refers to a breach and violation of public rights and duties due to the whole community, considered as such in its social aggregate capacity:

for when life is in danger it becomes of greater importance to the public in general than a simple matter of contract or personal claim between the parties directly concerned.

In *Langmaid vs. Holliday* (6 L. and Eq. Rep. 562) the distinction is recognized between an act of negligence immediately dangerous to the lives of others, and one that is not so. In the former case, the party guilty of the negligence is liable to the party injured, whether there be a contract between them or not; in the latter, the negligent party is liable only to the party with whom he contracted, and on the ground that negligence is a breach of contract.

PROPRIETARY GOODS. The word Proprietary is defined by Gould's Medical Dictionary to be "A medicine made by private formula, sold under a copyrighted name, or the preparation of which is not free to the pharmaceutical profession—belonging to a proprietor."

When a person or corporation manufactures a pharmaceutical preparation and does not publish to the public the contents of such preparation there is no warning given, and such person or corporation must be held absolutely liable for the contents, and made answerable for all natural results of putting the article on the market.

When manufacturers, as is alleged in this case, sell articles put up in retail packages it is understood, and necessarily follows that there is no mediatory precaution that can be taken between such manufacturer and the public for the articles do not undergo the inspection and surveillance of the retail druggist, and the public therefore look alone to the manufacturers.

PROPRIETORS' RESPONSIBILITIES. In the case of *Thomas vs. Winchester* (Reported in 6th New York Reports) Chief Justice Ruggles presents this law in the following language:—

"The defendant's (manufacturer's) negligence put human life in danger, the sale of the poisonous article was made to a dealer in drugs and not to a consumer, the injury therefore was not likely to fall on him, but much more likely to be visited on a remote purchaser, as actually happened. Can it be said that there was no duty on the part of the defendant to avoid the creation of that danger by the exercise of greater caution? or that the exercise of that caution was a duty only to his immediate vendee, whose life was not in danger? The defendant's duty arose out of the nature of his business, and the danger to others incident to its mismanagement."

All persons who handle medicines and poisons are in a business which in its nature may be imminently dangerous to the public, and they are chargeable with a corre-

spondingly extra amount of precaution and care in the prosecution of said business. And he who labels any article, represents to all that he has a personal knowledge of the contents, and thereby endorses any statement on such label contained and will become liable for injury resulting by any misstatements.

LIABILITY FOR ERROR ON LABEL. In the above case quoted (Thomas vs. Winchester) however the sale was of belladonna, which was sold as dandelion in a wholesale package, and was not a proprietary remedy. The action, also, was only a civil action for damages and the court held the defendant who labeled the article in the jar liable to answer to the remote parties injured.

The distinction between that case and the one under consideration, which as intimated, is stronger, is the difference between a proprietary medicine sold in the original package in which there is no inspection or knowledge presumed by the retail dealer and medicines sold in bulk to druggists for the purpose of retailing in small quantities and more especially of compounding physicians' prescriptions, which medicines the retail druggist is bound to know about. This is evidenced by Section 6 of Chapter 502, Laws of 1879, of the State of New York, as amended Chapter 661, of the Laws of 1898, in relation to the practice of pharmacy in Kings county and Section 2020 of the N. Y. City Consolidation Act of 1891 referring to the practice of Pharmacy in N. Y. City, which latter says:

"Every registered pharmacist shall be held responsible for the quality of all drugs, medicines and chemicals he may sell or dispense with the exception of those sold in the original packages of the manufacturer and also those known as patent medicines."

Sections 7 and 8 of the said Kings County Law and Section 2021 and 2022 of the New York Law also makes wholesalers responsible for their sale of poisons wrongfully labelled: therefore the proprietors of proprietary medicines will be held guilty of culpable negligence where they have wrongfully labeled an article and where they have wilfully mis-labeled an article they should if possible be more severely punished, and they are the only ones to answer for the injury, death or damage of any suffering caused thereby and, will be criminally held under the following sections of the penal code, irrespective of the above sections of the statutes;

Section 404 of the penal code says of the selling of poison without label:

"A person who sells, gives away or disposes of any poison or poisonous substance except upon the order or prescription of a regularly authorized practicing physician, without attaching to the vial, box or parcel containing such poisonous substance, a label with the name and residence of such person, the word 'poison' and the name of such poison all written or printed thereon in plain and legible characters, and a person who, after the 1st day of January, 1887, sells, gives away or disposes of, or offers for sale any sulphate or other preparation of opium or morphine, except paregoric and those preparations containing 2 grains or less of opium or morphine to the ounce, without attaching to the bottle, vial, box or package containing such sulphate or other preparation of opium or morphine, a scarlet label lettered in white letters, plainly naming the contents thereof, with the name and residence of such person, is guilty of a misdemeanor, under Section 193 of the Penal Code, State of N. Y."

Homicide is manslaughter in the second degree, when committed without a design to effect death.

By any act, procurement or culpable negligence of any person, which, according to the provisions of this chapter, does not constitute the crime of murder in the first or second degree, now manslaughter in the first degree.

When the employee of a firm is indicted for manslaughter by culpable negligence causing death, it is no excuse that his negligence arose from his obedience to the instructions of his superior officer, which were in violation of the rules. *People vs. Melins* N. Y. Cr. Rep. 39.

In a case in Pennsylvania—*Elkins, Bly & Co. vs. McKeon* (79 Penna. 498).—Oil was sold for illumination and an explosion occurred and the manufacturers were held responsible for their putting the oil on the market and holding out that it might be safely used as illuminating oil.

In the case in New York we think that the defense of contributory negligence could be of little avail, for though the exterminator caused the injury by its being put to a use not intended, still the fact exists that the company not only did not give the warning which would put all persons on their guard, and would doubtless have caused the mother to have put the article beyond all possible reach of the children, but the company is said to have gone further and labeled the article as harmless and free from poisons.

In conclusion it would be well to note that retailers now having notice of the poisonous nature of the substance will make themselves liable by selling it without a 'poison' label upon it.

This case is one of far reaching importance to all branches of pharmacy, since, so far as we can recall, the exact measure of the responsibility of the pharmacist in such circumstances as are here reported has not, heretofore, been adjudicated.

The opinion is based upon the facts as reported, and while it is to be presumed that the report is in the main correct, it is not vouched for. This does not, however, affect the value of the legal argument, since that may be considered as applying to a hypothetical case, but one which occurs constantly in practice, for pharmacists sell every day preparations which they believe to contain poisonous ingredients but which are not so labeled.

The opinion that "retailers now having notice of the poisonous nature of the substance will make themselves liable by selling it without a 'poison' label on it" is of special importance.

The question of what constitutes sufficient notice of the poisonous character of a proprietary preparation to involve direct liability of the pharmacist for the natural consequences of a sale of such article, is one which would have to be adjudicated in each particular case. It would probably be held, however, that if the poisonous nature of any preparation was a matter of common repute in the drug trade the pharmacist would be presumed to have knowledge of this fact. On the other hand, if the druggist should label an innocuous proprietary as poisonous, the proprietor might have cause for action for damages to the reputation of the article.

Thus is the retail pharmacist, as usual, ground between the upper and the nether mill-stones.

—:o:—

THE ALCOHOL QUESTION AGAIN.

THE Philadelphia druggists are evidently in earnest in their fight for the enforcement of the free-alcohol provisions of the tariff law. The views presented in the circular issued by this committee, and printed in full on another page, will meet with the hearty approval of the majority of the retail trade throughout the United States, and it is to be hoped that concerted action will be taken in support of the ends proposed in the circular.

To accomplish anything, however, prompt, strenuous and well concerted action is necessary, and in view of the apathy of the trade on so many points which are of the most profound and far-reaching consequences, we fear that there will not be that interest taken which the subject deserves.

—:o:—

THE LEAGUE AND THE PROPRIETORS.

AMONG the subjects of interest discussed at the last meeting of the Local Branch of the Retail Druggists' League was one which merits particular notice.

This related to the prescribing of nostrums by physicians and the filling of these prescriptions at dry goods stores. This our readers will perceive is the most startling development yet reached in the history of the patent medicine difficulties. It clearly points to the necessity of action on the part of some one of the organized bodies having jurisdiction over the practice of medicine and pharmacy. No stronger argument for the framing of stringent regulations for restricting the entire sale of drugs and medicines to properly qualified persons could be presented; but it may be that some more startling evidence is required, and not until a death or two has been caused need we look for reform. Meantime it would be interesting to know what the Academy of Medicine thinks of a physician who directs his patients to patronize the dry goods stores in preference to the establishment of a graduated pharmacist.

—:o:—

THE IMPORTATION OF DRUGS.

IT is not without interest to note the commercial condition of the various imported drugs as shown in the official reports of the imports and exports issued by the Treasury department of the United States and to search for the causes whose results appear in these reports.

The last official report issued covers the nine months ending October 1, 1894, and shows that for the month of September, 1894, the importations of crude camphor were but 102,914 pounds as against 179,226 pounds for the corresponding period of 1893. This falling off of 78,312 pounds seems mainly attributable to the derangement of commerce in the East, incident to the war between China and Japan, while the increased importation of refined camphor is also a growing factor in the situation.

The increase of 400,000 pounds in the quantity of shellac imported in September, 1894, as against September of the preceding year may be attributed to two causes. In the fall of 1893 the stocks of shellac had accumulated considerably in consequence of the labor troubles in the hat trade throughout Connecticut. The

general shutting down of this and other industries in which this gum is largely used which began in the early spring of 1893 had left both consumers and importers of shellac with considerable stocks on hand, and this of course cut down importations. The gradual resumption of manufacturing has now consumed much if not all of this surplus stock and as consequence of this and the improved business outlook we find a large increase in the importations of this gum.

The increase of three and a half million pounds, which is noted in the importations of gambler in September of this year over those of the same month last year is no doubt due to the large increase in the domestic manufacture of woolen goods consequent upon the admission of free wool and to the general revival of business.

A striking decrease in the importation of vanilla beans is observed in September of this year as compared with the imports of a year ago, the figures being 7,186 pounds for September, 1894, as against 20,148 pounds for September, 1893. This decrease in the face of the improved commercial and financial conditions of this country gives strength to the very unfavorable reports as to the stocks of vanilla beans held in Mexico and will no doubt give added strength to the already very firm market for this drug.

A general survey of the commercial situation as shown in these and in other States touching the welfare of the country gives ample warrant for the prediction of a steady if possibly slow progress toward the general prosperity which has been so conspicuously absent for many months.

A CONDENSED DISPENSATORY OF NEW REMEDIES

WITH a view to furnishing an entirely fair unbiased and thoroughly comprehensive summary of information concerning new and rare medicines we have prepared a guide which will be published in the columns of this journal under the title of "A Condensed Dispensatory of New Remedies." The aim has been to make the work as condensed as it is possible to do without interfering with its practical utility. It is by its practical utility that it is to

be judged, being intended for the use of the dispensing druggist, not the analytical chemist. For this reason chemical formulas, melting points and other information of no immediate value to the dispenser has been omitted not that they are unimportant but merely that they have no immediate bearing on the dispenser's every day work.

We submit a portion of this Condensed Dispensatory to our readers herewith with a view to soliciting their suggestions and advice as to how to make the work of the greatest possible value to

them. We do this in hopes that the practical men of the profession will aid us by their suggestions to make this compilation absolutely unique in its value and indispensable to every pharmacist.

In this connection we would say to each of our readers:

We wish you to feel that this Journal is being published expressly for you.

If you see in it what you don't want, let us know.

If you don't see what you want, ask for it. If it suits you say so.

Specimen from the Condensed Dispensatory of New Remedies which will appear in the American Druggist.

Abria. Brownish yellow powder, soluble in water. Fatal dose 1½ gr. For producing artificial conjunctivitis in ophthalmology like the abrus precatorius whence it is derived..... 5 gr. incl. each.

Acetophenone. (METHYLPHENYLKETONE, HYPRONE). Oily colorless liquid, soluble in A. E. oils, slightly in water. Hypnotic, reduces blood pressure, slows respiration. Dose 1 to 5 min. in capsules. 1 oz. incl. 1.50

Acetophenetidine. See Phenacetine.

Absinthin. Brilliant, prismatic colorless, bitter crystals, soluble in A. C. E., slightly soluble in water. Digestive stimulant. Dose 1½ to 2 grs. at meals. 15 gr. vial incl. each .75

Acetal. Etheral colorless liquid, of acrid, burning taste. Slightly soluble in water. Hypnotic depressant. Dose 0.2 to 3 liij 1 oz. incl. 1.00

Acetylphenylhydrazine. See Hydracetone.

Acid agaric. See agaricin.

Anisic. Colorless, prisms, soluble in A., insoluble in water. Antiseptic, antipyretic (wounds or acute rheumatism). Dose, sodium salt 15 grains. acid, 15 gr. vial. incl. each .25

Camphoric. Colorless, transparent bitter crystals or plates. Soluble in A. E., oils, hot water slightly in cold water. Anticatharrhal, antiseptic. (Nasal ulcers, etc.) In douche, spray or paint, ½ to 2 per cent solution. Antisudorific (night sweats). Dose 12 grains every 4 hours, or 30 grains at night. 1 oz. incl. .35

Cathartim. Brown hygroscopic scales. Soluble water or dilute A. Laxative. Dose 4 to 6 grs. 1 oz. incl. .75

Synemine. Brown crystalline powder. Soluble in A. less so in water. Insoluble C. E., Emetic. Dose 4 to 6 grs. To disguise bitter tastes rinse the mouth with a 5 per cent. solution.

Cinnamic. (CINNAMYLIC). White colorless crystals. Soluble in A., E., hot water. Insoluble in cold water. Antitubercular. Intravenous dose, 1 to 5 grs. in 5 per cent. oily emulsion, with 0.7 per cent. solution of na. cl. Locally in lupus, etc., in 5 per cent. emulsion or solution with cocaine. 1 oz. incl. 1.00

Dihydroxyacetic. Powerful antiseptic. The salts only of the two isomeric acids are used. See sodium salts.

Osmic. (PER OSMIC, OSMIC ANHYDRIDE). Lustrous orange, hygroscopic needles of suffocating and penetrating odor. Antiseptic disiccant (when applied pure), antineuralgic (epilepsy, sciatica). Hypodermic injection, 7 to 15 minims of 1 per cent. solution several times daily. Dose, 1-50 gr. in pill three or four times daily. 15 gr. vial incl. each .95

Phenylacetic. (ALPHA-TOLUIC). Lustrous crystals. Soluble in A., E., hot water. Less soluble in cold water. Antiseptic, antitubercular. (Phthisis, typhoid fever, etc.) Dose, 1 to 3 grs. three times daily in water..... 0.2 incl. 1.50

Salicylsulphuric Acid. (SULPHOSALICYLIC, SALICYLSULPHONIC). White crystals. Soluble W., A. Test for proteids, urine albumin, etc. 1 oz. incl. .75

Sclerotin. (SCLEROTINIC). Dragendorff's. Faintly acid, hygroscopic powder, odorless, tasteless. Soluble in water. Difficultly in A. Substitute for ergot in epilepsy, inferior to E. in gynecology. Dose, ¼ to 5 grs. per day..... ¼ oz. incl. 4.50

Sulpha-salicylic. See salicylsulphuric.

Trichloroacetic. (CHLORACETIC). Deliquescent, colorless crystals of faint odor, very caustic. Soluble in water, A., E. Powerful escharotic, purg. (Warts, naevi, corns, etc.) Astringent in nasal and laryngeal affections in 10 per cent. solutions. Test for urine albumin..... 0.2 incl. .40

Adenin. Glucoside from Adonis vernalis. Yellow, very bitter, hygroscopic powder. Soluble in water, A., E. Cardiac tonic, regulating the heart beats in dyspnea, palpitation, etc. Dose, ½ to 1 gr. four times daily with ammonium carbonate and chloroform water. 5 gr. vial incl. gr. .20 15 gr. vial incl. gr. .15

Agaracin. (AGARIC, AGARICIN OR AGARICINIC ACID). From white agaric, white microscopic scales, colorless, odorless, insipid. Soluble in A., hot water, slightly in E. and cold water. Almost insoluble in C. Antisudorific (in night sweats), ½ to 3 gr. in pill at night, or less hypodermically. 15 gr. vial incl. each .40

Aesculin. (POLYCHROME, BICOLORIN). Lustrous white acicular crystals. Soluble in hot water, fluorescent. Substitute for quinine in remittent fever..... 15 gr. vial incl. .50

Agathin. (METHYLPHENYLHYDRAZINE SALICYLATE). Small colorless or greenish scales, inodorous, tasteless. Soluble in A. E., Benz. Insoluble in water. Antirheumatic, anti-neuralgic. Dose, 5 to 8 grs. 2 or 3 times daily. 1 oz. vial incl. 0.2 3.50

Allyl tribromide. (TRIBROMHYDRIUM). Colorless or slightly yellowish liquid. Soluble in E. Sedative, anodyne (hysteria, asthma, whooping cough, etc.). Dose, 5 drops 3 or 4 times daily. Inj. 5 to 4 drops dissolved in E..... 1 oz. vial incl. 2.00

Alphol. (SALICYL-ALPHA NAPHTHOLATE). Resembling Salol, which see.

Aluminum acetate tartrate. Faintly yellowish granules, with acid, astringent taste, soluble slowly in water. Astringent, disinfectant. (Nasal and laryngeal affections.) Apply in ½ to 2 per cent. solution, or as snuff, with a parts of boric acid..... 1 oz. .50

Borefermate. Large, well-defined lustrous crystals, sweetish astringent taste. Soluble slowly in water. Astringent, disinfectant, used like aceto-tartrate, but is milder.

Aluminum gallate. also aluminum and ammonium gallate. See gallal.

Alumel. (ALUMINUM NAPHTHOL SULPHONATE). White or pinkish powder. Very soluble in water (blue fluorescence) and in glycerin, less so in A. Insoluble in E. Non-irritant, antiseptic. (Wounds, gonorrhea, etc.) ¼ to 2 per cent. solutions. In Dermatology, 10, 20, or even 50 per cent. solutions. 1 oz. incl. .60

Amido-antipyrine. Resembles antipyrine, but more soluble.

Amylene Hydrate. (DIMETHYLETHYL-CARRINOL, TERTIARY AMYL ALCOHOL.) Limpid, colorless, hygroscopic, liquid, with penetrating ethereal odor resembling camphor and peppermint. Soluble in A. E. C., 8 parts water. Anodyne, hypnotic. Dose, 45 to 60 minims. Whooping cough in children, 3 to 4 minims. 1 oz. incl. .45

Analgesine. Synonym for antipyrin.

Analgen. (ORTHOTHYOXANAMONOBENZ-OYLAMIDO CHINOLINE). Colorless crystals.

Anemonin. From Anemone pulsatilla. Small, white, acicular, inodorous crystals. Soluble in A. E., sparingly in water. Anti-catarrhal, sedative (whooping cough, etc.) Emmenagogue. Toxic in large doses. Maximum daily dose 3 grs. 15 gr. vial incl. ea. 1.30

Annidalin. (DITHYMOL TRI-iodide, THYMOL IODIDE). Reddish brown powder, decomposed by light. Soluble in E., slightly in A., insoluble in water. Antiseptic application similar to iodoform or aristol.

Anthrarsolin. (DESOXYALIZARIN). Phenol derivative, allied to crysophanic acid. Yellowish white powder, insoluble in water and dil. acids. Soluble in glycerin, in 5 parts A., and in alkaline media. Substitute for chrysarbin. Apply in 10 per cent. ointment or solution. 1 oz. vial incl. .50

Antifibrin. Trade name for acetanilid, which see.

Written for the
American Druggist and Pharmaceutical Record.

BISSY NUTS; THE KOLA OF THE WEST INDIES.

By FRED. B. KILMER.

New Brunswick, N. J.

The African slave traders who peopled the West Indies with Gold Coast negroes, brought with them the seeds of the *Cola acuminata* a plant which served to ameliorate the condition of the slave, and has since contributed greatly to the comfort and welfare of his descendants.

ITS INTRODUCTION INTO THE WEST INDIES.

The introduction of this *Sterculia* into the West Indies was long enough ago for the plant to become naturalized and its name changed to Bissy (or Bissi). The African designations are unknown in these countries. The term "Kola" has very recently come into use in some of the English islands. Its native name is derived from the name of its first planter, Daniels and others attributing its introduction into these islands to a Guinea slave trader named Biche or Bassai, in 1630-40. It has therefore had the advantage of several centuries of cultivation under favorable conditions of soil and climate.

ITS HABITAT.

The geographical limits of the *Cola acuminata* in the West Indies cannot be accurately defined. My records and investigations show that it is found in Cuba, Jamaica, and Porto Rico, and more or less frequently in the Leeward islands and the Windward islands as far as Trinidad. Occasional plants have been noted along the coast of Brazil north of the Amazon, in the Guianas, Venezuela about Colon, and isolated here and there along the islands and coasts of Costa Rica, Nicaragua and Honduras. Wherever bananas nutmeg or cocoa grow, kola will flourish and is generally found.

DESCRIPTION OF THE KOLA TREE.

Although there are many species of *Sterculia* to be found in the West Indies, the *Cola acuminata* was the only kola observed. It is too well known to need much description. In its general appearance a kola tree may be said to resemble the horse chestnut or the tropical orange. The tree grows to a height of 20 to 40 feet, and is valuable for timber, ornament and shade. It begins to bear fruit when about five years old and comes into full bearing in nine or ten years, producing two crops annually, one in midsummer and one in late winter. The yield varies considerably, according to the soil and location. The kola thrives best in well watered and storm sheltered spots, where the soil is deep, rich and of a clayey character. It is a hardy tree and flourishes throughout an extensive territory and a wide range of temperature, being occasionally found in an altitude of 3,000 to 5,000 feet.

AGE OF THE TREE.

The age of the tree is indefinite; in certain instances it has been known to bear well for fifty years successively. It has been propagated mostly by self-sowing, or a here and there planting by the natives. But since its commercial value has come into recognition its cultivation has assumed a new importance and the government gardens furnish the seeds and young plants in large quantities; some governments are even offering bounties for its cultivation.

THE YIELD OF CROP.

Under favorable conditions its yield is large. Each fertile flower produces five pods and each pod five or more seeds. A quart of seeds, or nuts, weighing one and a half pounds, are sometimes gathered from a

single flower, and it is not unusual to secure one hundred to one hundred and fifty pounds from one tree, the average crop being from seven to ten thousand pounds per acre.

THE COLLECTION OF THE NUTS.

The bissy gatherer has little knowledge concerning the constituents of the nuts, or for what uses they are required in far off lands. Those gathered for his own or for the use of the native physicians are sorted and prepared with considerable care; but those intended for export seem to receive very little attention, and anything that will pass in the market goes. The nuts sent to the markets are frequently mildewed, mouldy and partially decomposed. The volatile constituents, glucosides and other principles, have become dissipated or transformed, the delicate ferment power has acted, to a greater or less degree; fermentation and bacterial diseases have set in and produced marked changes; finally the whole has dried into a lump of vegetable horn, bitter and rank to the taste, and with but little virtue, aside from the varying amount of caffeine it may contain.



BRANCH AND FRUIT OF THE WEST INDIAN KOLA.

It was not a matter of wonder to me, after living among such drug collectors, that a delicate drug, like kola, should prove disappointing when it reached the American practitioner. On the other hand, it is a matter of surprise that drugs supplied by these unskilled natives should be of any value as remedial agents containing, as they often do, sensitive glucosides, alkaloids and volatile principles, which require intelligent handling if they are to be preserved in their original form and without loss of efficiency.

SKILL OF THE NATIVE COLLECTORS.

I spent some time under the tutelage of the native collectors who have acquired a reputation for their skill in preparing and curing bissy nuts. For chewing and certain other purposes the products of their hands command an unusually high price. Their secret consists of expert knowledge coupled with the exercise of extraordinary care. They select the nuts from healthy trees, the location, quality of the soil, color of the nut, etc., entering into their calculations. Only thoroughly matured nuts and perfect specimens are used, and the collectors are trained to detect the smallest spot or blemish in the

nuts; the slightest evidence of decay, softness or lack of color and rotundity being sufficient to cause their rejection. After being scrupulously cleanse, and while still moist, the perfect nuts are placed upon leaves in a small dug-out in the earth. The great care taken to prevent change or damage by bruising, moulding, mildew or the action of the sun, air and moisture is noticeable, and furnishes the indication that these rude and simple people have somehow acquired habits of extreme care and excessive caution.

THE DIFFERENT VARIETIES OF KOLA.

Some differences of opinion exist among the natives as to the relative value of kola raised in different localities, and variation in the size and form of the flowers and seed. The number of cotyledons in the *Cola acuminata* varies from two to five; and those containing the larger number are considered the best. The white nuts are also considered preferable. But until the exact nature of the active principle of the plant is more clearly known, these points cannot be accurately determined. So far as I could decide, many of these differences were immaterial.

AS USED BY THE NATIVES.

In its African home the kola is surrounded by symbolism and endowed with miraculous power and divine attributes. It has lost these in gaining a foothold in the Antilles, but has acquired an important place as a domestic remedy and as a sustaining beverage. Among the natives the most common use of kola is for chewing. The undried nut is used, the juice being swallowed and the fibrous portion rejected. The nut or fruit is simply taken from the pod, washed and wrapped in a leaf or placed in a pouch or box to exclude the air, retain the moisture and prevent change. The "burden bearers" and field laborers, both male and female, follow this practice, and marvellous stories are told of the value of this stimulant and nutrient in preventing tissue waste and enabling the laborer to perform, without fatigue, exhausting work under a blazing sky with but little or no food or drink. Energy is not supposed to be a prominent characteristic of the West Indies, but it is, nevertheless, true that the natives frequently undergo arduous and long-continued labor with the help of

bissy nuts, and perform feats of endurance which would be trying in a cooler climate. A bit of salt fish, a piece of roasted yam or cassava and bissey is a day's ration; on this they tirelessly toil in the broiling sun, cutting cane, making roads, mowing and carrying heavy loads, apparently no more exhausted at night than when the day dawned and keep this up year after year. Bissey users seem to never wear out from overwork; decrepit and broken down old men and women are not seen. In addition to its use in sustaining strength it is reputed to possess tonic qualities of especial value in the weakness and debility which follow low fevers and long illness. In such cases it is prescribed as nourishment, to be chewed freely or made into a drink with milk, honey or the juices of fruit. Physicians told me that in cases where patients had loathed food they could retain milk and broths on the addition of kola.

KOLA BEVERAGES.

Kola beverages in the shape of bissey tea (prepared similar to tea, coffee and chocolate, or in connection with them), kola champagnes, kola ale, kola cordia's, bitters and wines containing alcohol are in universal use. They are served in restaurants, at the family table, as morning "bracers" in the rum shops, stores, markets and wayside stalls. These compounds are important articles of commerce, entering into domestic import and export trade. The only institutions I saw that could claim the dignity of factories were devoted to the preparation of kola.

KOLA SUPERIOR TO COFFEE.

Coffee is not regarded as conducive to health in this climate, and, in fact, in all climates people might properly exercise more discretion in its use. Tea is expensive in the West Indies, spirituous and malt liquors are disastrous in their effects both to the Northern man and the native born; hence the popularity of kola in its various forms, as a substitute for coffee, tea and alcoholic stimulants. The disordered digestion and nervous disturbances attendant upon coffee drinking, the dyspepsia, tremulousness and other symptoms which follow the inordinate use of tea, are not to be noticed in kola users. Its effects are bodily and mental stimulation, and capacity to expend energy without waste or fatigue. Its slight sedative action produces content and restfulness, and unlike other stimulants, it leaves behind no reaction or depression. Many professional men assured me that these kola beverages were their "sheet anchor." There seems to be some propriety, therefore, in the circular which a West India manufacturer of kola handed me, wherein were enumerated as those who are benefited by using it, the following:

"Ministers of the Gospel, after exhaustive sermons; doctors after exciting amputations; editors after gathering the scandal of the day; schoolmasters after thrashing dunce; scholars, "before and after" examinations; postmasters, after deciphering misdirected letters; carriage builders, after competing with Yankee buggies; custom house agents, after trying to make importers pay duty on free goods; governors, after blowing their own trumpets; treasury clerks, after counting petty cash; bankers, after wrestling with financial problems; politicians, after forgetting their promises; women during the season of house-cleaning; anybody and everybody who is struggling through this weary world."

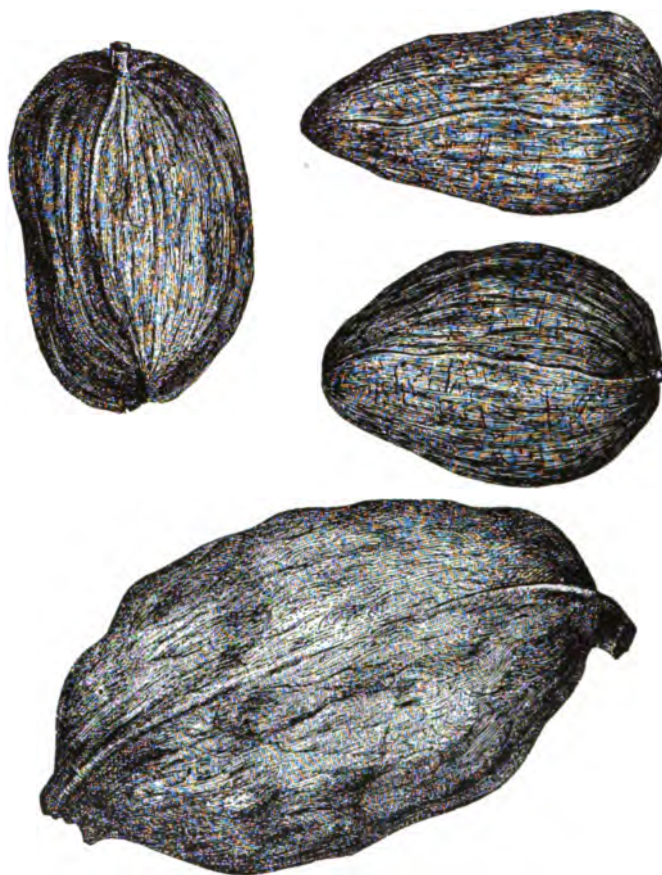
ITS SUSTAINING PROPERTIES.

From personal experience I can vouch for some of the reputed qualities and effects of kola. Coming from the North I

found "old Sol" very young and active in the tropics. Exposure to his rays speedily enervates one and frequent siestas are necessary.

When I became a kola user this condition of affairs was changed and I found I could display as much energy, to say the least as those to the manner born. I was soon able to dispense with between-meal lunches, and if necessary, the mid-morning breakfast, without inconvenience. On several occasions I made expeditions into the country where it was impossible to obtain food without considerable trouble and delay. Most of these days were spent in riding a mule in bridle paths up and down the bare mountains undergoing constant exposure to the direct rays of the sun, and it frequently happened that a cup of kola in the morning with some bits of bread would be my only food and drink until the evening dinner, save the bissey nuts I chewed.

bissy nut is considered a most important agent, superior to coca and rivaling their famous panacea "Bush Tea." Its slight bitterness gives it the action of a bitter tonic and in addition it seems to give a decided zest to food and drink. Resident physicians testify that it stimulates the flow of gastric juice and thus aids digestion. They also claim that it gives relief in cases where food resting heavily in the alimentary canal has decomposed and fermented. In the native therapeutics it is reputed to possess virtues as an antidote for poisons and in many huts a tincture of bissey nuts in rum is kept macerating against the time of need. It is also thought to be efficacious in infectious diseases and a remedy for inebriety. Some of these notions are well founded, others are probably mythical. Against poison and infection, it can only be of indirect benefit, but for inebriety it is certainly effectual. A liberal



AFRICAN KOLA NUTS IN OUTER SHELL.

KOLA REPLACES SLEEP.

There is among the natives an old saw to the effect: "Experience teacheth that the bissey eaten in the evening hindereth sleep," and I am aware of its truthfulness. There is no sleep after a good allowance of kola taken at night, and yet the wakefulness it produces is not the irritating restlessness such as is caused by drinking too much tea or coffee. Under the influence of kola one is cheerful, tranquil, even energetic. One can read, talk, write, work, or play all night, but sleep will not come. A sleepless night occasioned by indulging in tea, coffee, or other stimulants leaves one nervous, fretful and exhausted, but with a wakeful night under bissey one only feels chagrined at the loss of a tropical night's delightful sleep.

NATIVE REPUTATION OF THE KOLA.

In West India native materia medica the

dose of it will sober a drunken negro in half an hour. It is also claimed that if a man chew bissey, he can at the same time drink rum *ad libitum* without becoming intoxicated. After the peculiar orgies and periods of debauching to which some of the natives are addicted, its effects are certainly very striking and efficient. After many days and nights of indulgence and excesses by the free use of bissey they turn up fresh and vigorous.

DESCRIPTION OF THE KOLA NUT.

The fresh nuts divested of all pericarp weigh from 85 to as high as 575 grains (46 to 57 per cent. of which is moisture). The skin covering is very smooth, polished, close in texture, tough and wiry, closely adherent to the substance of the nut. The epidermis is either a light violet, a pink-rose, or a yellowish-white in color; sometimes the yellowish-white are found in the same pods

as those of other colors. The true coloring matter seems to reside chiefly in the skin. From this coloring matter, and probably from coloring matter arising from a further decomposition of the nut, the natives prepare a dye. On cutting or breaking the skin by even so light a puncture as a pin point so as to admit the air, a yellow spot is immediately formed, changing rapidly to brown wherever the air has penetrated. This coloration forms more rapidly in the sunlight; this change also takes place upon drying the nut even when care is taken to keep the skin unbroken. This action is doubtless due to a splitting up and oxidation of the glucosidal constituents and seems to in some way be aided by the action of the ferment of the kola.

CONSTITUENTS OF KOLA.

Within the nut is a mucilaginous substance not abundant, but enough to be noticeable.

Separated and dried the gum seems, as might be expected, slightly the nature of a bassorin gum. The entire cotyledon is solid and tough, consisting of starch cells surrounded by cellulose walls. Extraction of the fresh kola with chloroform gives an extract consisting of traces of resinous matter, tannin and fatty matter. Upon diluting with hot water a faint aromatic odor resembling cacao butter is evolved, due probably to the presence of the essential oil. Some coloring matter is found, but only when the operation is not conducted with proper precautions.

ALKALOIDAL CONTENTS.

The amount of alkaloids obtained by direct extraction of fresh kola by chloroform, gave an amount ranging from .05 to one-tenth of one per cent. free caffeine. In nuts not fully mature the first extractions would only give traces of alkaloid, and it is questionable if in unripe kola any free caffeine exists as such. The caffeic constituents of the kola in the fresh nuts reside in a glucosidal body. By the decomposition of this glucosidal body in the ripening of the nuts and its subsequent handling and drying, caffeine is formed.

At the time of my experiments I was not aware of the works of Knebel and Heckel, who had separated from dried kola a substance which Heckel called kola red, and which Knebel called kolanine. The glucoside, as found in the fresh kola, evidently differs from these substances. Their experiments were conducted with dried kola, where no doubt this glucoside had become partially broken up and changed by the action of oxygen, zymolysis and other causes.

THE ACTIVE PRINCIPLE.

This glucosidal principle extracted from the nut by alcohol (after previously extracting the free caffeine by chloroform) produces, when taken into the system, all of the marked effects which are attributed to the use of kola; in fact, more marked action than many of the reported actions of alcoholic preparations of kola made from the dried drug. Quite similar results follow the mastication of kola from which the alkaloids have been extracted by chloroform, showing that after the extraction of the already formed free alkaloids, there remains a principle which has the same waste preventing and stimulating properties as the entire nut.

KOLAZYM, A NEW DIASTIC FERMENT.

This glucosidal body is very easily decomposed in water, acids and alkalies, and among the bodies evolved in its final transformation is caffeine. Heckel has shown that the substance he named "kola red" contained in some instances as high as 88 per cent. of what he calls nascent caffeine.

His substance "kola red" and Knebel's "kolanine" are probably bodies formed in the progressive steps of the transformation. There is also present in the kola a diastatic ferment power which, for convenience, I have termed "kolazym." This ferment in addition to a diastatic action on starch is also a glucosidal splitting ferment.

THE FUNCTIONS OF KOLAZYM.

The office of this ferment in the plant economy is very obscure, but it probably has to do with the change that takes place in the ripening nut whereby the carbohydrates and nitrogenous elements are transformed into glucosides and eventually alkaloids and glucose. This ferment within the nut, with the air excluded, either from the natural conditions which surround it or from some other cause, acts very slowly. But in contact with the air, or in suitable media, its action is more or less rapid, and during its action products are formed which seem to be suitable soil for air and mould germs, so that these last finally seem to overcome the action of the kolazym, or, at least, to inhibit it, and these mould germs carry on a farther decomposition of the gums, starch cells, the glucosides and alkaloidal constituents present. The presence in the fresh nut of this glucoside and enzyme explains the changes which take place when the nut is chewed. The taste of the nut when first bitten into

almost different drug, and this may account for its limited use in this country. My convictions are strong that all medicinal preparations of kola should be made from the undried and unchanged nuts, and that the more carefully they are selected and handled, and the quicker their constituents are extracted, the more marked and efficient will be their medical action. How far this may apply to other drugs is a problem worthy of extended study.

Whether the kola in any form is of any remedial value is for the physician to decide, and a correct conclusion can be arrived at only when the action of bissey, or kola, in its habitat, can be reproduced in the United States. To strive to accomplish this is within the province of Pharmacy.

As an humble contribution toward this achievement, I offer these observations on "Bissy Nuts, the Kola of the West Indies."

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Hahnemannian Logic Refuted.

A few years ago Dr. Holmes was asked if he knew anything of an alleged experiment before the French Academy of Medicine demonstrating that the ten-trillionth part of a drop of septicemic poison would destroy the life of a guinea pig, it having been publicly argued in Boston that this proved the potency of infinitesimal doses of medicine. Dr.



A PILE OF BISSY NUTS (WEST INDIAN KOLA) DEPRIVED OF THE OUTER SHELL.

is rather astringent and bitter; this, under the action of saliva, probably aided by the action of the kolazym, rapidly changes to a sweet. Thus it can be reasoned that in the native process of mastication the glucoside is broken up, or partially so, and glucose and alkaloids are evolved.

To this slow transformation of the kola by the breaking up of the glucoside is the marked difference and probable superiority of kola over other caffeic drugs which contain only free caffeine.

I have not here intended to present any full or detailed results of my study, nor can completeness be claimed. Since my return I have continued my investigations, aided by many experts, who will report their conclusions at a later date. I have also placed extractions of the drug in various menstruums in the hands of physicians for clinical trial.

THE KOLA OF THE MARKET INFERIOR TO BISSY.

There are many interesting problems yet unsolved. However, so far as results have been obtained, I am convinced that my observations in the Antilles were in the main correct, and that the kola, as known in the market, does not properly represent the bissy used by the West Indians. I believe I am warranted in saying that it is an

Holmes added in a postscript to his note of reply: "The argument from the effect of animal poisons in small quantities to medicinal substances in general is like saying that because a spark will burn down a city, a mutton-chop will feed an army."

—:O:—

CACHETS FOR INTESTINAL ANTISEPSIS.

(DR. H. HUCHARD.)

Benzonsaphthol.....	25 gms.....	{ 3 vjss }
Powdered charcoal.....	15 gms.....	{ 3 ss }
Pancreatin.....	5 gms.....	{ gr lxxv }

Mix and divide into fifty cachets.—To take from four to six cachets daily.

ANÆSTHETIC SOLUTION.

(SCHLEICH *Rep De Pharm*)

Cocaine hydrochlorate.....	.2
Sodium chloride.....	.4
Morphine hydrochlorate.....	.05
Distilled Water.....	200

The water should at first be in excess, and then be boiled down in order to sterilize it. The active ingredient in producing anæsthesia is the water; the cocaine merely renders the introduction of the water painless, and this latter then, as Liebreich has shown, produces the local anæsthesia.



Kapatine is said to be a fanciful name given to colored acetanilid.

Zinc Subgallate is a siccative and antiseptic and is recommended as a dressing for eczema, fresh and septic wounds, and other specific lesions of the skin; also for otorrhoea and hæmorrhoids. It is applied pure or diluted with indifferent powders or ointments. For injections in gonorrhoea it is suspended in water and mucilage in the proportion of 1 in 16. Internally zinc subgallate is recommended in doses of from $\frac{1}{4}$ to 4 grains in fermentative disorders of the intestines and night sweats.

New Mercurial Salt for Injection.—This is the double hyposulphite of mercury and potassium. Injections of this compound, according to Dreser and Camerer (Med. Bull.) are no more painful than ordinary injections of morphine. They produce no irritation or local caustic effect, and the dose may be exactly regulated, 1 gram of chloride of mercury corresponding to 2.83 grams of the hyposulphite of mercury and potassium. The solution for injection is made in the proportion of 0.25 gram in 10 grams of distilled water. From 0.5 to 1 cubic-centimeter of the solution is injected, corresponding to about $\frac{1}{4}$ to $\frac{1}{2}$ grain of corrosive sublimate.

Sterilization of Catgut.—Tscherning has employed dry heat in the sterilization of catgut for sutures and ligatures, with satisfactory results. Catgut thus prepared retains its strength, and is easily preserved. The gut is cut in suitable lengths for use in operation, and enclosed in doubled sealed envelopes. These are placed in a sterilizing oven and the temperature gradually raised, an hour being occupied in increasing the heat to 176° F., and two hours more in increasing it to 302° F. For three hours the gut remains exposed to this temperature, and then the oven is permitted gradually to cool. Bacteriologic investigation has shown gut thus treated to be absolutely sterile.—Centralbl. f. Chir.

Sodium and Potassium Phosphides.—A. Joannis has obtained a compound to which he ascribes the formula PH_2K by passing phosphoretted hydrogen into an ammoniacal solution of potass ammonium. This potassium phosphide occurs in fine white needles, and is analogous to potassium amide, NH_2K . In a similar manner he was able to prepare sodium phosphide, PH_2Na , from sodammonium, as a white solid. The action of heat decomposes the compounds, as follows: $3\text{PH}_2\text{K} = 2\text{PH}_3 + \text{PK}_3$. Water also decomposes them, with liberation of phosphoretted hydrogen, and when ammoniacal solutions containing them are treated with nitrous oxide, a volume of nitrogen is liberated equal in volume to the nitrous oxide employed (Comp. rend., cxix., 557).

Magnesium Voltaic Cell.—H. N. Warren suggests the substitution of magnesium for the zinc rod in the Daniel's voltaic cell, on account of its greater reducing action, and

the use of cupric chloride instead of cupric sulphate in the outer vessel, because of its greater solubility in water, and the possibility of making the solution so as to offer less resistance. This solution should be rendered strongly acid by means of hydrochloric acid, and will be very slowly decomposed. The porous pot should be charged with a strong solution of ammonium chloride which dissolves the magnesium uniformly, forming a double chloride, and at the same time prevents local action. With these modifications it is said a voltaic arrangement may be constructed giving a voltage equal to a nitric acid battery or bichromate cell (Chem. News, lxx., 179 Pharm Jour)

Migraine.—This body was originally put forward as a definite citrate of caffeine and antipyrin. According to Ewald, its composition was:

Antipyrin.....	85
Caffeine.....	8.5
Citric acid.....	6

The Pharm. Weekblad (43, 1894), however, gives the analysis of a sample as:

Antipyrin.....	89.4
Caffeine.....	8.2
Citric acid.....	0.56

The editor of the Russian pharmaceutical journal comments strongly on the substitution of mere mechanical mixtures in the place of what are claimed to be chemical compounds. Hamburg has forbidden the free sale of this body to its pharmacists.—Journal de Pharmacie d'Anvers. B. & C. D.

Antimony Sulphide.—H. Baubigny discusses the question whether the compound formed by the action of an alkaline hyposulphite upon antimony trichloride is a sulphide or, as generally supposed, an oxy-sulphide, and gives the results of experiments performed with a view to solving the problem. He concludes that the coloring matter of the so-called vermilion of antimony, formed by the action of sodium hyposulphite on tartar emetic in the presence of tartaric acid, in so far as it is a definite chemical compound is the ordinary sulphide, Sb_2S_3 . If it possesses a special tint that, it is asserted, is due to the conditions under which the compound has been prepared. As to the compound prepared from antimony trichloride in the absence of tartaric acid, if it contains oxygen it is only as an admixture, in the form of oxychloride (Comp. rend., cxix., 687).—Through Pharm. Jour.

Bismuth Nitrosalicylates.—H. Causse shows that, even in dilute solutions, nitric acid in combination with bismuth oxide converts salicylic acid into β -nitrosalicylic acid which is capable of forming a series of salts the appearance of which varies with their composition. Thus, the neutral β -nitrosalicylate of bismuth— $(\text{C}_6\text{H}_4\text{NO}_2\text{OH CO}_2)_2\text{Bi} + 2\text{H}_2\text{O}$ —forms colorless needles; the basic salt— $\text{C}_6\text{H}_4\text{NO}_2\text{O CO}_2\text{BiOH} + \text{H}_2\text{O}$ —occurs as citron yellow needles; and the sub- β nitrosalicylate of, uth— $(\text{C}_6\text{H}_4\text{N}$

$\text{O}_2\text{OH CO}_2)_2\text{Bi}_2\text{O}_3\text{H}_2 + \text{H}_2\text{O}$ —precipitates in needles of a reddish-orange color. This property of the acid seems to be owing to the presence of the group NO_2 in its molecule. The red coloration of bismuth salicylate, supposed to be due to the presence of iron, is alleged to be caused by the presence of a nitrosalicylate. These statements should be of interest to dispensers (Comp. rend., cxix., 690. Pharm. Jour.)

Photographic Developers.—G. A. LeRoy observes that the reducing power of alkaline peroxides, or of hydrogen peroxide, in aqueous solution, is capable of exerting itself upon the bromide or chloride of silver in gelatin emulsions employed on dry photographic plates, after those salts have been exposed to the action of light. The intensity of the reduction effected is proportional to the extent of the luminous action upon the exposed surface. Such solutions, therefore, are capable of revealing latent photographic images obtained by means of dry plates. At the same time the alkaline peroxides are inferior in that respect to the developing agents usually employed in photography, and require the time of exposure to be prolonged. Moreover, the developed image, formed by metallic silver and its oxides, loses its intensity to some extent in the hyposulphite or sulpho-cyanide solutions used as fixing baths (Comp. rend., cxix., 557).

Mercury Sulphates.—R. Varet gave in a paper presented before the French Academy some interesting illustrations of the interdependence of chemical and physical factors. Thus, he shows that when water acts upon sulphate of mercury more heat is produced than with any other reaction of the latter, and that this exothermic reaction explains why the salt is decomposed into free acid and a basic salt, since in the case of alkaline or metallic salts which are not decomposed by water the action is endothermic. Again, whilst sulphuric acid displaces the hydrocyanic acid in potassium cyanide, without precipitation and with the disengagement of heat which corresponds to the thermal preponderance of the first acid relatively to the base, in the case of mercury it is the hydrocyanic acid which completely displaces the sulphuric acid with a similar disengagement of heat. This reversal of the ordinary conditions between the two acids is precisely similar to what occurs with hydrocyanic and hydrochloric acids, and is in that case explained in the same way by the thermal preponderance of the former acid. Sulphuric acid is also more or less completely displaced from sulphate of mercury by hydrochloric acid for the same reason.—Pharm. Jour. and Trans.

Pepsin Wine.—This preparation is official in the German Pharmacopoeia, glycerin being employed as a preservative. In the second edition of that work the formula was as follows: Pepsin, 50 gm.; glycerin, 50 gm.; water, 50 gm.; acid hydrochloric, 5 gm.; white wine, 1845 gm. That in the later edition, however, is different thus—pepsin, 24 parts; glycerin, 20; acid hydrochloric, 3; water, 20; syrup, 92; tinct. aurant., 2; sherry, 839, or enough to make 1000 parts. The first four ingredients are directed to be mixed together and allowed to stand eight days. Filtration is then performed, and the other ingredients are added. Schmiedeberg objects to the addition of glycerin as being injurious, and other writers have objected to the use of wine, alleging that the alcohol present might hinder the action of the ferment, though no satisfactory evidence appears to have been produced on either of these points. The addition of

syrup is strongly recommended by several of these individuals, but a writer in the Bulletin de Pharmacie de Bruxelles suggests that the proportion of syrup should never exceed 20 per cent., or it may check the digestive action of the pepsin, Vulpinus having shown that whereas albumin, 10 gm., may be digested in one hour by pepsin, 0.10 gm., in the presence of hydrochloric acid, 10 drops, diluted with water, 100 gm., the addition of sugar, 10 gm., prolongs the period of digestion to five hours. The presence of alcohol, 1 gm., or sweet wine, 4 gm., prolonged the period to one hour and twenty minutes only.—Pharmaceutical Journal.

Limeseed Oil.—The Vossische Zeitung, in an article dealing with this oil, says: "More than a hundred years ago the importance of the fine sweet oil made from the seeds of lime trees was mentioned, but no attempts were made to procure this oil on a large scale, and later on the matter was forgotten. A few years ago limeseed oil was, as it were, discovered for the second time, and the experience then acquired justified great importance being ascribed to the industry. Lime trees blossom so abundantly every spring and produce such a multitude of seeds, which fall to the ground in autumn, that it would be easy to collect large quantities under every lime tree avenue. The seeds possess 58 per cent. of oil, and are in this scarcely surpassed by any other seed; only slightly by the para-nut, the cocoanut, and the hazel nut. The percentage of other important oil-yielding seeds is far less. The oil of the lime-tree seed, which can be pressed in all sorts of ways, is distinguished by a beautiful clear color and fine taste, has not a trace of bitterness or aromatic flavor, and may be justly compared to the finest olive oil. It never becomes rancid, and can be left exposed to the air in open vessels without the slightest change in taste or state of preservation. It is an oil that does not dry, and has not the least inclination to combine with oxygen. It is, therefore, not only valuable as a food oil, but also for industrial appliances. It does not freeze at any degree of cold temperature known to us, and is not changed at even 21° Centigrade. It is remarkable that this valuable oilseed has not been more utilized, for it would not be difficult to find the proper places for obtaining the seed in quantity and collecting it cheaply. The lime-tree produces the same enormous quantity of seed almost every year, and therefore there would be no stoppage in the regular manufacture of the oil."

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Extracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.*

(Continued from Page 325.)

Veterinary Remedies—For Cattle.

Inflammation of the Udder.

SALICYLIC OIL.

	Drachms.
Salicylic acid.....	3
Camphorated oil.....	100

Rub the udder carefully twice daily.

PURGATIVE.

	Ounces.
Potassium nitrate, granular.....	2
Sodium sulphate, granular.....	20

Give one third of the above at morning, at noon and at night in one liter of chamomile infusion.

*Translated for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

Fever.

FEVER POWDER.

	Drachms.
A.—Potassium nitrate, granular.....	6½
Sodium sulphate, granular.....	62½

Mix and give half of the above in one quart of warm bran water at night.

	Drachms.
B.—Salicylic acid.....	6½
Sodium bicarbonate.....	3½
Magnesium sulphate.....	9½

Tetter or Ringworm.

Tetter usually attacks old under-fed animals where stalls are ill ventilated and unclean.

The stalls must first of all be thoroughly cleaned, aired and whitewashed with lime, and the affected parts of the animal treated with the following:

OINTMENT FOR TETTER.

	Ounces.
Soft soap.....	10
Water.....	10
Wood tar.....	5

Heat in a water bath until of a uniform consistency.

Wash the entire body of the animal every two days with warm soft soap solution (1 to 20), rinse with warm water and when the animal is dry rub the above ointment well in under the hair.

Loss of Appetite.

When not the precursor of a more serious illness it should be treated as a simple disturbance of the digestion, and the following preparations can be used to advantage in its treatment:

POWDERS.

	Ounces.
A.—Dried Glauber's salt, in coarse powder.....	40
Sodium chloride.....	30
Sodium bicarbonate.....	10
Gentian root, in coarse powder.....	10
B.—Calamus root, in coarse powder.....	25
Wormwood, in coarse powder.....	25
Sodium chloride.....	30
Sodium sulphate, granular.....	15
Ginger, in coarse powder.....	50
C.—Licorice root, in coarse powder.....	18
Wormwood, in coarse powder.....	10
Calamus root, in coarse powder.....	10
Marshmallow, in coarse powder.....	10
Cloves, in coarse powder.....	2
Sodium sulphate, granular.....	30
Sodium chloride.....	30

The following directions apply to all three of the foregoing: For a large animal give two tablespoonfuls; for a small one give one tablespoonful daily, made up into a paste with water. Continue this for eight days, when the appetite will be wonderfully improved.

TO DRINK.

	Ounces.
A.—Gentian, in coarse powder.....	1
Magnesium sulphate.....	10

Mix with one quart of warm water, and give for one dose.

	Ounces.
B.—Sodium sulphate.....	2
Sodium chloride.....	8
Linseed meal.....	1

Mix with one quart of luke-warm water, and give for one dose.

FOR A CALF.

	Drachms.
C.—Sodium bicarbonate.....	5
Rhubarb, powdered.....	1½

Divide into two doses, and give each dose in a cup of chamomile tea.

YELLOWS OR JAUNDICE.

	Ounces.
Sodium bicarbonate.....	1½
Sodium sulphate.....	10
Juniper berries, crushed.....	1½
Water.....	65

Give half of the above morning and evening.

FOR PERISTENT CASES.

	Ounces.
Aloe, in coarse powder.....	5
Rhubarb, in coarse powder.....	5
Argols (crude tartar), in coarse powder.....	10
Calamus, in coarse powder.....	10
Sodium sulphate.....	10

Give one heaping tablespoonful in a quart of infusion of juniper berries three times a day.

Colic.

INJECTION.

	Ounces.
Soft soap.....	4
Sodium chloride.....	4
Linseed oil.....	8
Water.....	32

Give one injection as above, every hour, until the bowels act.

TO DRINK.

Magnesium sulphate.....	8 ozs.
Linseed oil.....	2 pints
Chamomile infusion (1 to 20).....	6 pints

Give one quart every four hours, until all is given, or until the bowels act.

STOMACH TROUBLE.

	Grains.
Ginger, ground.....	154
Mustard, ground.....	154
Gentian root, ground.....	154

Mix and give one such powder in a pint of warm water when the bowels have acted and the colic has passed off.

Lice.

Lice are most apt to trouble young, only troubling old ones when they are very dirty.

	Ounces.
Soft soap.....	10
Alcohol (denaturalized*).....	10
Crude naphthalene.....	02
Water.....	40

Heat the whole together until dissolved and then stir until cold.

Rub the places infested by lice thoroughly with the above, and wash off the next day with warm soda solution. When the animal is again dry repeat this operation twice. The lice generally die after the second application.

TOBACCO DECOCTION.

	Ounces.
Raw tobacco (not manufactured).....	05
Alcohol.....	10
Hot water.....	60

Pour the boiling water on the tobacco, allow to stand half an hour, strain and add the alcohol.

Moisten the parts infested with lice, and wash off on the following day with warm soda solution. Repeat the operation three or four times as may be necessary.

Catarrh of the Stomach.

Indigestion, etc.

Catarrh of the stomach is generally produced by irregular feeding, eating indigestible food, without taking sufficient exercise or from eating large quantities of non-nutritious food.

The treatment consists in the administration of mild laxatives combined with bitter tonics, and of hydrochloric acid.

During the illness the animal should be fed only with easily digestible food, such as flour, or bran water.

LIQUID MEDICINES.

A.—Antimony.....	5 drms.
Argols (crude tartar).....	10 "
Wormwood.....	2 ozs.
Sodium sulphate.....	4½ "

*This is equivalent to the British methylated spirit, being alcohol rendered unfit for drinking, which can be had tax free.

Mix and give one fourth of the whole every four hours in a quart of warm water.

B.—Alces.....	Ounces.
Sodium chloride.....	1
Linseed meal.....	3½
Water.....	4

Mix and give one half in the morning and the other half at night, dissolved in one pint of warm water.

C.—	FOR OBSTINATE CASES.	Ounces.
Hydrochloric acid.....		½
Linseed meal.....		3½
Water.....		33½

Give one-half at night and the remainder in the morning.

D.—	FOR CHRONIC INDIGESTION.	
A'oes.....	5 drms.	
Calamus.....	10 "	
Argols (crude tartar).....	5 "	
Antimony.....	2½ "	
Linseed meal.....	12½ "	
Water.....	32 ozs.	

Give one-half at night and the remainder in the morning.

E.—	FOR CHRONIC CASES.	
Calamus root.....	6 drms.	
Chamomile.....	6 "	
Linseed meal.....	6 "	
Antimony.....	4 "	
Water.....	32 ozs.	

Mix and give two-thirds of the mixture, giving the remainder after an interval of four hours.

(To be continued.)

—O:—

A. P. A. Observation Sheets.

In accordance with the resolution adopted by the American Pharmaceutical Association at its 43d annual meeting at Asheville in September, 1894. Alfred R. L. Dohme, chairman of the Section on Scientific Papers has issued a circular in which he places before the pharmacists of the country the Observation Sheet given below. The purpose of this sheet (as was duly pointed out in his address by the ex-president of the Association, E. L. Patch, who formulated it) is to collect and tabulate a series of data upon incompatibilities, difficult problems and experiences of all kinds in compounding and dispensing drugs and how they were solved; upon the relative salability and therapeutic value of the various new remedies; upon the condition of the various products purchased by the pharmacist, his experience with formulas of the pharmacopoeia, national formulary, etc., as well as errors or difficulties of any kind found in the pharmacopoeia, dispensaries or elsewhere.

When it is considered that as many as 8,000 pharmacists will receive a copy of this observation sheet and that the committee will thus secure the experiences, reports, etc., of that number of men, it will readily be admitted that great value will accrue to every pharmacist. These reports will be tabulated and in all probability published, and the experiences, suggestions, ideas and much of the knowledge of this large number of men will thus be made public, and all will derive benefit.

Chairman Dohme will gladly send a supply of observation sheets to all those who desire to join in this grand piece of work if they will inform him to that effect in writing. Copies can also be procured through the editor of the American Druggist and Pharmaceutical Record.

The scope of the sheet is indicated by the subjoined list of questions:

The Prescription.

- 1.—A prescription received calling for therapeutic incompatibilities (medicaments opposed to each other in action).
- 2.—A prescription received calling for chemical incompatibilities. (A precipitate, a; change of color, b; caused by chemical action).
- 3.—Physical incompatibilities. (A precipitate due to

change in character of solvent, c; due to a separation, d)
4.—A difficult pill mass. 5.—An unsatisfactory ointment. 6.—An excessive dose. 7.—Dangerous abbreviation. 8.—Peculiar composition. Copy of R attached. How the trouble was treated and result.

(Space here for answers to above.)

The Store.

- 1.—New remedies called for and times employed.
- 2.—Obsolete, unmarketable, or peculiar products called for.

(Space here for answers to above.)

The Laboratory.

—A—

Experienced difficulty in securing satisfactory products in using U. S. P. (a) Nat. Form (b), published in (name of Drug Journal or other work of reference) (c), formula for the following:

- 1.—Fluid extract of
- 2.—Tincture of
- 3.—Syrup of
- 4.—Elixir of
- 5.—Plaster of
- 6.—Ointment of
- 7.—Extract of
- 8.—
- 9.—
- 10.—Chemical product

Character of trouble and how remedied.

(Space here for answers to above.)

—B—

- 1.—Noticed the following errors in the U. S. P. (a), Dispensatory (b), description of name (name of article or product).
- 2.—Had the following difficulty in applying the U. S. P. test for (name of article or product).
- 3.—Found the following product had become unsalable from having changed as stated (name article or product). Had been in stock for (time), and was stored (place or situation as concerns temperature, moisture, etc.).

(Space here for answers to above.)

—O:—

Manufacture of Essential Oils.

The essential oil industry has derived considerable advantages from the progress in the chemical investigation of essential oils which has taken place during the last few years. The term which used often to be applied to the supposed workmanlike manufacture of an essential oil, that it had been turned out according to the rules of the art ("lege artis") is now no longer suitable.

A mode of manufacture based upon intelligent principles has replaced rule-of-thumb work; craftsmanship has been ousted by science, which, in teaching us the physical and chemical properties of an oil, indicates at the same time ways and means of improving its manufacture. Nowadays each raw material requires its own method of distillation, every crude oil its own special mode of rectification. The processes of preparing similar oils are sometimes altogether different in principle, while in other cases slight deviations in method are sufficient to bring about important improvements in the manufacture.

The fact that freshly distilled oils have a disagreeable subsidiary odor, the so-called "still smell" was formerly looked upon as quite a matter of course, but it is now known to indicate either want of knowledge in the process of distillation or gross carelessness. The fresher the oil the purer should be its odor and taste. Freshly rectified oil of caraway should smell just as aromatic and agreeable as the freshly crushed seed. If, as a result of defective distillation, an oil has once acquired the well-known mouldy sharp odor, no amount of exposure of the oil to the air will remove this entirely; but, on the other hand, the oil, if kept in this condition, all the more rapidly falls a victim to the fate of almost all essential oils, viz., resinification or other decomposition, without having ever been really pure in odor or taste.—Schimmel's Bericht.

Eau De Cologne Drinking.

The newspapers are all alike in one respect; they are for ever hunting up some scare, and seasoned to its highest, presenting it to a confiding and unsuspecting public. One day it is opium and morphine; another it is dustbins, general purity of our entertainments, and the horrors lurking in milk, and the use of other peoples' brushes and combs. In the end it all comes out the same, and that is that we are all in a very bad way and had better look out. What the risks would be to poor humanity if these writers did not look into matters and just warn people, goodness only knows. Perhaps the New Zealander would have his advent. Perhaps not. Eau de cologne drinking is the last little matter with which our friends are amusing themselves. We are told women, those who are ashamed to buy or be seen drinking whiskey, gin, and other spirits, resort to eau de cologne, and that it is a well known fact that a vast quantity of the perfume disappears in this way; in fact, it has been suggested that its great popularity is based upon this. It has certainly anything but an agreeable flavor, and one must be, it would be supposed very hard pressed to take it as a stimulant.

PALATABLE COLOGNE.

Upon this point we learn that an alteration has been made; the makers—that is to say some of them—adapting themselves to circumstances, and meeting the wishes of their patrons by preparing a cologne which is not quite so nasty as usual. Our information indicates that it is only certain small and irresponsible makers who have descended to this step, the old well-known brands maintaining their formula intact, with all its agreeable odor and disagreeable taste. An English newspaper said recently that the price in Cologne of a dozen bottles of the size most in vogue is but \$1.75, and the British Customs are chiefly responsible for the far higher charges to which we are accustomed. All eau de cologne, however, does not come from Cologne. Hundreds of thousands of bottles of a well-known Hamburg brand annually leave the Elbe at prices ranging from three shillings a dozen. These find their way to India mostly, and in all probability more than half the output is drunk.

REASONS WHY IT IS DRUNK.

One is that it can be obtained and swallowed without arousing suspicion. Another is that lax Moslems regard it as something which does not rank with wine or spirit, although how they quiet their usually obtrusive consciences on this latter point it is difficult to understand. Strict Mohammedans, we are told, would under no circumstances permit such hair splitting; but unfortunately, like the rest of the wicked world, they are not all strict, and, like Rip's drink in the opera, eau de cologne does not count. A third reason put forth is—and this is a hard one, indeed—it produces a state of intoxication more complete—note the word—than can be caused by an equal quantity of any other spirit, for besides being very strong, it is loaded with various ethers. Dr. Stuhlmann, describing Emin Pasha's country, mentions that many a Central African Mohammedan drinks his eau de cologne and water as regularly as an Englishman does his whisky, and that sugar is added to make it more palatable. Dr. Baumann says the Arabs mix eau de cologne with their drinking water, and employ it in their cooking, while the Soudanese are large consumers of the article. Consul Siemen, at Macassar, mentions a native Rajah whose favorite cocktail was eau de cologne and

orange bitters. Some few years ago a Cologne firm flooded the Bombay market with a cologne with which was mixed kummel and sugar; but this was not appreciated, first on account of its flavor, and secondly, because it was not sufficiently potent—an all-important factor in the native eyes. In Zanzibar it has been prescribed as a medicine by the native doctors, and has been taken to so kindly by the patients as to become an established remedy up to the point of dissipation. It is now taxed there as spirits, but up to recent times it was free, and sold at lower rates than gin or brandy.

Phosphorescence at Low Temperatures.

Similar investigations to those made by Professor Dewar have been undertaken by Raoul Pictet, the intention being to determine the specific action of a considerable lowering of temperature upon the brilliancy of certain bodies which shine in the dark after having been exposed to sunlight. Tubes of glass filled with the powdered sulphides of calcium, barium, strontium, etc., all substances which possess the property of phosphorescence in a high degree, were exposed to the solar rays and afterwards proved to be luminous in the dark.

This was done in such a way as to fix upon the memory the mean value of the progressive diminution of the emitted light, and the time also was noted during which the light was strong, less strong, and weak respectively.

The tubes were next placed in bright sunlight for one minute and then suddenly introduced into a double-walled glass cylinder, the interspace of which was filled with nitrous oxide at -140°C . In about five or six minutes the temperature of the tubes was about -100° . They were then withdrawn and, when observed in a perfectly dark chamber, no luminosity whatever was perceptible. As the tubes recovered their normal temperature, however, the phosphorescence returned, without the exciting agency of either the sun's rays or diffused light. These results were proved to be general for all phosphorescent substances employed.

The complete suppression of phosphorescence at very low temperatures having been thus demonstrated, attempts were next made to fix the limits of temperature at which the luminosity ceases to be visible. Tubes of phosphorescent powder were exposed to sunlight, then rapidly conveyed to the dark chamber and partially immersed in alcohol cooled to -75° . The phosphorescence disappeared completely from the portion of the powder contained in the part of the tube immersed, when its temperature was reduced to -60° or -70° , but after immersion for more than half an hour the light returned spontaneously as the effects of cooling wore off. The phenomena were alike with all the phosphorescent substances examined. The blue, green, or orange light emitted by different metallic sulphides tended in all cases to change to an earthy yellow before being extinguished. It was proved by repeated experiments that condensed moisture on the outside of the tubes did not in any way influence the extinction of the phosphorescent light, or affect any of the observed results. It appears certain, to Pictet, that the production of phosphorescent light requires a certain movement of the constituent molecules of bodies. When these are frozen and the calorific oscillatory movements are checked, the luminous waves are not pro-

duced and the phosphorescence disappears accordingly (Comp. rend., cxix., 527).—Through Pharm. Jour. and Trans.

Medical Notes.

Apomorphine and Hysterical Attacks.—Rosser recommends one-tenth of a grain of apomorphine, hypodermically to break up and prevent the recurrence of hysterical attacks.

Agreeable Salicylic Mixture.—Potassium acetate, 2 ounces; salicylic acid, half ounce; syrup of lemon, 2 ounces; peppermint water, 8 ounces. The dose is a tablespoonful every three hours.

Walnut Leaves in Scrophulosis.—A decoction of walnut leaves is recommended by Rodionon in the Medical Week, as an excellent means of treating scrophulosis. He prescribes half a cup or a cupful of it every morning and evening, and uses it also for baths. It is said that the swelling of the glands subsides under its influence; it must, however, be continued for months, and even years.

Treatment of Red Eczema.—According to a writer in the Medical Press and Circular, black mercurial lotion ("Lotio Hydrarg. Nigra" B. P.) diluted with one-twelfth part, by measure, of glycerin, is of great value in the treatment of that variety of eczema known as eczema madidans (red eczema). Slips of linen are soaked in the solution, the raw surfaces are covered with these, and the dressing is retained by a light bandage. The dressing should be changed twice daily.

Treatment of Vaginal Leucorrhoea in Little Girls.—The best treatment of leucorrhoea in little girls is stated by Dr. A. Kissel, Privatdocent of Pædiatry at the Medical Faculty of Moscow (Sem. Med.), to be the following: rest in bed, daily warm baths, reconstituent diet, cod liver oil in large doses, and vaginal injections twice a day of a 5 per cent. sulphate of zinc solution. By this means the affection is completely cured within from three to four weeks.

Creosotal in the Treatment of Aphthæ and Impetigo.—Creosotal (Creosote carbonate) which is much less caustic than ordinary creosote, is said by Dr. E. M. Chamier (Tours) to give good results in the treatment of aphthæ and impetigo. In cases of aphthæ, he pencils the buccal mucosa with creosotal five or six times daily; the pain rapidly subsides. In cases of impetigo, he also pencils with creosotal the crusts or ulcers, after having first washed the affected parts with a decoction of Panama wood (quillaia saponaria).

Phenyglycollate of Antipyrine in the Treatment of Whooping-cough.—Dr. Rehn (Frankfort-on-the-Main) has met with success in employing phenyglycollate of antipyrine in the treatment of whooping-cough. The drug was administered in doses of from 10 centigrammes to 1 gramme ($1\frac{1}{4}$ to 15 grains) according to the age of the child, this treatment resulting in complete recovery within three weeks in slight, and within five weeks in grave cases. Milk and alkalies, which decompose the phenyglycollate of sodium, must be avoided when this remedy is being employed.—Semaine Medical.

Treatment of Premature Alopecia, according to the Medical News, recommends washing the hairy scalp with soap and water for about ten minutes daily, using tar soap and lukewarm water, and finally cold water; the hair should be dried, and frictions with the following solution made: Water, 250 grams; mercuric chloride, 50

centigrams; glycerin and cologne-water, each fifty grams. This may be followed by shampooing with absolute alcohol to which has been added from $\frac{1}{2}$ to 1 per cent. of naphthol, and anointing the scalp with the following mixture: Salicylic acid, 3 grams; tincture of benzoin, 3 grams; Neat's-foot oil, 100 grams.

Disinfection of Tubercular Sputa by Parachlorophenol.—Dr. A. Spengler states that a 2 per cent. solution of parachlorophenol is one of the best possible means of destroying the virulence of the sputa of consumptives. He has found that parachlorophenol infallibly kills Koch's bacillus. He injected into the peritoneal cavity of Guinea pigs 1 cubic centimeter of an emulsion of tubercular sputa, prepared either with ordinary water or with a 2 per cent. parachlorophenol solution. On killing the animals some time thereafter, those which had been inoculated with disinfected sputa were entirely free from bacillary infection, whereas those into which the emulsion not mixed with parachlorophenol had been injected, all, without exception, presented well marked tubercular lesions.

Picrate of Ammonium in Malaria. S. P. Popoff, of Vernyi, Siberia (*Proceedings of the Omsk Medical Society*, 1894, No. 5) warmly recommends picrate of ammonium internally in intermittent fever. He tried the remedy (dose not stated) in 42 successive cases (mostly of quotidian fever); of the number, 37 were recent, and all ended in recovery, the paroxysms ceasing on an average in four days. Of the 5 inveterate cases 2 were also cured, but in 3 the remedy failed. In 5 other cases antipyrine, and in 6 methylene blue, were tried, the results being disappointing (4 and 5 failures respectively).

A New Method of Anæsthesia, by the association of chloroform with sparteine and morphine, formed the subject of a paper by MM. Paul Langlois and Maurange read at the last meeting of the Academy of Medicine. The object of this combination is to diminish the danger of stoppage of the heart and fainting in anæsthesia by chloroform. MM. Langlois and Maurange state that a quarter of an hour before administering chloroform they give the patient a hypodermic injection composed of three centigrammes of sparteine and one centigramme of hydrochloride of morphine. This they have used in 140 cases, and in none of them had they the slightest anxiety regarding the heart's action. The only objection made to the paper, and it was acknowledged by the authors, was that many hundreds of experiments are necessary before it is possible to judge definitely regarding the utility of the method.

Inhalation of Oxygen in the Treatment of Certain Forms of Neurosis.—According to an Italian physician, Dr. V. Romaro, inhalation of oxygen is very beneficial as an adjuvant in the treatment of so-called functional neurosis of the convulsive type. When resorted to in the course of a convulsive attack, such inhalations are said to diminish its intensity and duration, and sometimes even abort the paroxysm. Employed systematically, they gradually reduce the number of attacks, improve the general health, and may result in complete recovery, as was the case with several patients under the care of Dr. Romaro. The therapeutical effects of these inhalations are said to be due to the fact that the oxygen counteracts the asphyxial state of the tissues and destroys the ptomaines, the accumulation of which in the organism is often responsible for the appearance of convulsive paroxysms.

The Treatment of Syphilis and Certain Cutaneous Affections by Electric Corrosive

Sublimate Baths.—Dr. K. Ullmann has found in treating patients in the Polyclinic under the direction of Dr. H. von Hebra, Docent of Dermatology and Syphilography at the Medical Faculty of Vienna, that a bath of from thirty to forty minutes' duration, containing from 60 to 100 grammes (2 to 3 ounces) of perchloride of mercury, and traversed by an electric current of from 100 to 200 milliamperes, exerts a very favorable influence on syphilitic lesions, as well as on some other affections, such as adenitis, erysipelas, abscesses, ulcers of the leg, certain forms of infective eczema, etc. This electric cataphoresis is said to be particularly beneficial in the treatment of grave and inveterate types of syphilis, which resist the therapeutical measures usually employed, or are accompanied by serious disturbances of the general health.—*Semaine Medical*.

The Dangers of Applying Naphthol to the Skin.—Dr. M. Baatz, assistant to Dr. Aufrecht, head physician to the Madgeburg Hospital, has found that in two brothers one six, and the other eight years of age, affected with scabies, acute nephritis supervened in consequence of a few applications of a 2 per cent. isonaphthol ointment. The children were cured of the skin disease, but three weeks later they developed albuminuria with oedema of the lower limbs. One died, and at the autopsy the diagnosis of nephritis was corroborated. Neither of them had before presented any sign of albuminuria or any other affection capable of engendering nephritis, and it is, therefore, evident that the renal lesion was due to the use of the naphthol ointment. This fact proves that naphthol ointment must not be used for the treatment of scabies, notwithstanding its powerful and prompt curative effect on this parasitic affection.—*The Medical Week*.

A Modified Method of Refrigeration by Means of Wet Wraps.—In grave febrile diseases, especially in typhoid fever, Dr. Max Herz (Vienna) advises (*Sem. Med.*) resorting to a new antipyretic procedure, which consists in wrapping the patient in a sheet, moistened with water at the temperature of the room, and kept in a state of permanent moisture by wetting it with a sponge steeped in fresh water, as soon as it evaporates by contact with the burning skin of the patient. After twenty minutes have elapsed, the sheet is removed, and the patient is left completely naked for ten minutes.

This is very convenient in practice, inasmuch as the patient need not be removed from the bed, which it is frequently difficult to do when one has to deal with comatose subjects or refractory children. The antipyretic effects of this treatment are said to be nowise inferior to those of cold baths.

A Treatment of Piles.—Dr. C. Beck (New York) has successfully employed, in eight cases of piles the following treatment: The rectum is evacuated and disinfected by repeated irrigations with a solution of salicylic acid after which a suppository is introduced containing 12 centigrammes (2 gr.) of hydrochloride of cocaine and from 1 to 2 centigrammes ($\frac{1}{4}$ to $\frac{1}{2}$ gr.) of morphine.

Fifteen minutes thereafter, a few drops of a saturated solution of iodoform in ether are injected, on each side of the hæmorrhoidal tumors, into the surrounding cellular tissue. Thereupon a suppository containing 12 centigrammes (2 grains) of salicylic acid is introduced into the rectum, and opium and bismuth are administered in order to keep the patient constipated for two or three days. When this time has elapsed castor oil is administered, and, at the same time an enema of 60 grammes (2 ounces) of pure olive oil.

The injections of iodoform ether are said to determine the formation of cicatricial tissue and the obliteration of the veins round the hæmorrhoidal nodules, the effect of which is the disappearance of the tumors.

Compound Tincture of Benzoin in the Treatment of Certain Accidental Wounds.—The application of compound tincture of benzoin is said by Dr. J. Garland Sherrill (Louisville) to be an excellent means of treating small wounds caused by contusion or edge tools, especially when situated on the hands. This method of treatment is particularly convenient and valuable when the patient can only be seen at long intervals, as is so frequently the case in rural districts.

The procedure employed by Dr. Sherrill is as follows:

The wound is cleansed with an antiseptic liquid and covered entirely, in such a manner as to encroach somewhat on the surrounding healthy tissues, with a layer of absorbent cotton, on to which is then poured the tincture of benzoin. After the alcohol has evaporated, the benzoin forms with the cotton a coating, protective and antiseptic at the same time, which adheres strongly to the subjacent parts. This dressing, the application of which is only accompanied by a transient smarting sensation, may be left in place for six or eight days. When it gets a little loose, the patient can easily tighten it himself by pouring on, from time to time, a few drops of the tincture of benzoin.

—O—

Foreign Schools versus American Physicians.*

By W. S. THORNE, M.D.

Physician to St. Mary's Hospital, Professor of Surgery, San Francisco Polyclinic.

Unmannered dog! Stand thou when I command,
Or, by St. Paul, I'll strike thee to my foot
And spurn upon thee, beggar, for thy boldness.

England protects its medical men by a judicious provision, requiring all practitioners to obtain a licentiate, or a degree, from some authorized medical body within the United Kingdom; France, by denying the medical function to all except to those possessing a French or Spanish (Mexican) qualification; Germany, by a prohibition against its own graduates, and until they have passed a further examination by a state board, independent of all the universities. Even benighted Mexico has established a wholesome law for the protection of its medical men, and it recognizes no medical degree giving a right to practice within its borders save and except the French. Such are the restrictive measures against foreign practitioners that prevail, for the most part, throughout Europe. Who will question the wisdom or the justice of such restrictions, tending, as they do, to promote the welfare and the sovereignty of a representative national body? We have no adverse criticism to pronounce against them. We approve them, and we endorse their practical application. When the government of Prussia—speaking through the Berlin University—refuses to recognize any diploma from an American medical college, we say, amen. When the French Minister of Public Instruction announces the law that all foreign medical men must undergo the final examinations of the French candidate for the medical degree, we would give our assent: be it so. But, how much longer will the great body of American physicians patiently submit to the invidious discrimination against

them by every foreign government? How much longer shall we tacitly submit to the foreign tradition that the "medical sciences" are not taught in America; that the "medical sciences" are known and practiced only abroad? If the blood that warms in my veins as I write at this moment is a sample of that which should inspire my countrymen, we opine that it will not be long. We venture the assumption that this great and learned body will proceed to inquire if there is any special reason in law, ethics or the comity of nations why a certificate of medical attainment granted by a medical board in Prussia should entitle its possessor to rights and privileges in America that are not accorded in Prussia to the medical certificate from a learned body here? Why a diploma from a college in Prussia permits the holder to practice under it in this country, but is not considered a proper qualification in Prussia? Why men of equal intelligence and equal attainments are not equal in fact? Having traced the reason of this ruling to the arrogant pretence of superiority, we find, at last, the true explanation in protection—protection of home talent, protection to domestic genius, to home institutions and to fatherland.

When the great body of American physicians shall have fully realized the anomalous position it occupies, the stigma and gratuitous insult thrust upon it by an arrogant and presumptuous rival, bidding for honor and lucre before the world, when this cowardly national insult shall have been fully weighed by our local and national medical organizations, there will grow out of it, we trust, an irresistible movement in the direction of reform in the medical laws that will effectually secure protection to American physicians. The great body of intelligent and influential citizens will personally enter into the canvases of every legislative candidate throughout every State in the Union. It will reject every and all candidates not pledged to enact a law requiring foreign physicians to pass a most rigid examination, equal to the final examination of the most advanced institutions; such examination always to be taken in the English language. And when a candidate shall have passed the examination, he may apply his foreign sauce to the American goose without let or hindrance. From the hod carrier up through the trades unions, the mechanic, the artisan, every industrial body throughout this broad land has its protective barriers. Inventive art, scientific devices and letters are providently fostered by patents or copyrights. The legal profession protects itself from encroachment by the itinerant and the incompetent. The medical profession alone stands without the semblance of protection from the insolent assumption of itinerant frauds and medical tramps from every capital and village in Europe.

Fostered by the doctrine of superiority to all the world in general, and to the American medical profession in particular, the foreign cat-bagger assumes a supremacy with easy grace. The arrival of a medical exotic in a small community is an event of note. The community soon learns that the imperial college in which it grew, and by which it is accredited, does not recognize the existence of such a thing as an American medical diploma, ergo the local physician is not qualified—in a word, he is not a physician; he is—an American pretender! His nationality and education are against him. The prestige of the foreign gentleman holding a diploma from the only genuine medical school is too much for the native *Æsculapius*, and the "Original Jacobs" captures the community. Let the Yankee humbug be silent in

* *Pacific Medical Journal*.

the presence of this stupendous jugglery from "over the seas!"

What has become of American manhood, or the blood of '76, that, year after year, thousands of well-bred, well-educated American gentlemen calmly submit to the arrogant assumption of a horde of medical tramps and impecunious tricksters who flock to our shores from every country under the sun, and whose only guarantee of medical attainment is a cabalistic suffix and a foreign name. Let our next legislature and our National Association answer this question and give to it a practical solution. We hereby disclaim intent to offend or insult any gentleman holding a foreign degree. We speak for even-handed justice to the honest and qualified American practitioner. We claim his right of protection against foreign insult and assumption. We thank God that we are American that we are educated in this country, that we hold American degrees, of which we are proud. We are speaking to a principle in American politics and for medical ethics. If our laws regulating foreign immigration are not amended, the medical profession is only one of the many orders of society in this country that must be driven to the wall. As American citizens we claim the right of untrammelled speech, and as such we assume the responsibility of our language.

—:o:—

The Preparation of Cocaine.*

The complete separation of cocaine from the accompanying alkaloids found in the leaves is a troublesome and tedious operation, and has been superseded to a large extent by methods based on our knowledge of the constitution of these alkaloids.

It has been shown that the chief alkaloids found in the leaves are cocaine (methylbenzoyl-ecgonine), isatropyl-cocaine, and cinnamyl-cocaine, and they may thus be considered as built up from methyl-ecgonine by combination with different acid radicals.

The principle of the process employed† consists in the decomposition of the accompanying alkaloids by acids, the formation of ecgonine by splitting off the different acid radicals as methyl esters, and the subsequent partial synthesis of cocaine from the ecgonine thus obtained.

The method employed is as follows:—The leaves are extracted by a suitable solvent, and the greater part of the cocaine is removed by fractional crystallization. The alkaloidal residue, containing a little cocaine, is then decomposed by boiling with strong hydrochloric acid into ecgonine and the methyl esters of the different organic acids. Finally, the ecgonine is separated and purified, and then converted into cocaine. Two methods can be employed for this conversion; (1) The ecgonine is first benzoylated and then methylated by treatment with methyl iodide and soda, or, better, by passing dry hydrochloric acid gas into a solution of benzoyl-ecgonine in methyl alcohol (Einhorn); or (2) the methyl ester of ecgonine is first formed, and then benzoylated to form cocaine. In both cases we require to add the two groups, and for this two operations are necessary.

Einhorn has devised a method (Bericht, xxvii., 1523) which necessitates only one of these synthetical operations, and this depends on the fact above

stated, that the different alkaloids may be viewed as consisting of methyl-ecgonine combined with different acid radicals, and instead of decomposing the total alkaloid into ecgonine, the methyl ester of ecgonine is obtained, which then only requires benzoylating to yield the required alkaloid. The method is as follows:—50 grammes of the accompanying alkaloids are boiled with 300 grammes of methyl alcohol and 100 grammes of pure sulphuric acid for 3 to 4 hours in a water-bath. The alcohol is then distilled off and the syrupy residue treated with a little water in which the methyl-ecgonine is dissolved, and the greater part of the organic acids precipitated as methyl esters. The aqueous solution is now extracted with chloroform, and then made alkaline with excess of potassium carbonate, when the ecgonine methyl ester separates as an oil, which is then easily extracted by chloroform. A modification of this method consists in passing dry hydrochloric acid gas into a methyl alcohol solution of the accompanying alkaloids, and, after cooling, heating for two hours. The methyl-ecgonine is separated by the same method as used when sulphuric acid is employed.

The yield is found to be theoretical, and the resulting methylecgonine was recognized as such by purification and the identity of the melting point of its hydrochloride with that previously recorded. It can be distilled with very little decomposition in a vacuum.

When the methyl alcohol is replaced by ethyl alcohol, the higher homologue of cocaine is obtained, and we have thus a simple method at command for forming any of the higher homologues by dissolving cocaine in the required alcohol, and saturating with dry hydrochloric acid gas and boiling for two hours.

The process above described depends on a very general method of preparation in organic chemistry, viz., the formation of a methyl ester by treatment with methyl alcohol in presence of sulphuric or hydrochloric acid. In this case the ecgonine is produced under conditions that at once induce the formation of methyl ecgonine, which then only requires benzoylating to yield cocaine.

—:o:—

Kings Co. Pharmaceutical Society.

At the November meeting of this society papers were read by O. A. A. Rouillon on "Elixir Three Phosphates," and "Fluid Extract Coffee," and referred to the Pharmacy Committee. The formulas are given below:

ELIXIR THREE PHOSPHATES

Iron Phosphate.....	256 gr.
Quinine Sulphate.....	128 gr.
Strychnine Sulphate.....	1½ gr.
Ammonium Phosphate.....	128 gr.
Citric acid.....	256 gr.
Boric acid.....	128 gr.
Alcohol.....	1 fl. oz.
Water.....	6 fl. drams.
Aromatic elixir.....	16 fl. ozs.

Dissolve the ammonium phosphate, citric acid and boric acid in 12 fluid ounces of the aromatic elixir; then add the sulphates of quinine and strychnine. With three drams of water make a solution of the iron phosphate, using the water as hot as may be necessary; then mix the solutions adding the alcohol and enough elixir to bring the bulk up to 16 fl. ounces

FLUID EXTRACT OF COFFEE

Coffee, freshly roasted and ground.....	3 xxxii
Glycerin.....	1 fl. oz.
Water q. s. ad.....	oiv

Dilute the glycerin with three pints of water and pour the solution upon the coffee

contained in a wide mouth bottle. Macerate for several days; then transfer to a percolator, add water and displace three pints. Continue the percolation until the coffee is exhausted, then evaporate the product to one pint to be mixed with the three pints of the last percolate.

SYRUP OF COFFEE.

Fluid extract (as above).....	fl. 3 ii
Simple syrup.....	fl. 3 iv

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Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make us of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, it uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Detection of Arsenic in Wall Paper.—

R. F. L. & Co. ask us to name an inexpensive book treating of the analysis of wall papers for arsenic, etc.

We are unable to name a work that is wholly devoted to this branch of analytical work. Prof. Henry Leffman's translation of Weyl's "Sanitary Relations of the Coal Tar Colors" (P. Blackiston, Son & Co., 1012 Walnut street, Philadelphia), gives in detail the official (German) methods of detecting arsenical compounds in manufactured articles, but expert processes for the detection of arsenic in wall paper are not given.

The most complete American investigation of which we are aware is contained in Dr. Hill's report upon arsenic in wall paper and fabrics made in 1892 to the Massachusetts State Board of Health. The method adopted by Dr. Hills has been followed with satisfactory results by a number of chemists and is generally regarded with favor.

The following is a brief description of the process: The paper, cut into small pieces, is placed in a porcelain evaporating dish and thoroughly moistened with a few cubic centimeters of concentrated sulphuric acid to which one-thirtieth of its volume of concentrated nitric acid has been added. The mixture is allowed to stand till the paper has absorbed the acid and became thoroughly disintegrated, when the dish is placed on a sand-bath and heated by a low flame with constant stirring till the paper is thoroughly charred and the nitric acid expelled. When the charred mass has cooled, a few cubic centimeters of water are added, the mass is thoroughly pulverized with a glass rod flattened at one end, heated to boiling to expel sulphur dioxide, then filtered and washed with water. The quantity of water used for extraction should not much exceed 30 cubic centimeters (about one fluid ounce).

The extract, obtained in the manner described, is tested for arsenic by the modification of the Marsh method known as the Berzelius-Marsh method. A failure to obtain a mirror within twenty-five to thirty minutes is regarded as proof of the absence of arsenic. All materials used in the process must be absolutely free from arsenic, and the mirror when obtained must be carefully tested in order to avoid any error which might result from the presence of antimony.

By means of the Berzelius-Marsh method, comparing the mirror obtained from an aliquot part of a solution obtained

* *The Pharmaceutical Journal and Transactions.*
† Liebermann and Giesel. Bericht, xxi., 396.
Einhorn and Klein. Bericht, xxi., 335.

from a measured amount of paper with a set of standard mirrors obtained from known amounts of arsenious oxide, the amount of arsenic present can be easily and quickly estimated.

Lea & Perrin's Worcester Sauce.—R. B.—The recipe for this sauce is believed to have been devised by an English nobleman with the help of a brother gastronome. The name Lea refers to the humble apothecary who first prepared it. The formula is a very complicated one and reads as follows:

Wine vinegar.....	1½ gallons
Walnut catsup.....	1 gallon
Mushroom catsup.....	1 gallon
Madeira wine.....	½ gallon
Canton soy.....	½ gallon
Moist sugar.....	½ pounds
Table salt.....	19 ounces
Powdered capsicum.....	3 ounces
Powdered pungents.....	1½ ounces
Powdered coriander.....	1½ ounces
Chutney.....	1½ ounces
Powdered cloves.....	½ ounce
Powdered mace.....	½ ounce
Powdered cinnamon.....	½ ounce
Ground asafoetida.....	6½ drams

Mix the first seven ingredients separately and set aside. Make a separate mixture of the spices and add to the mixture contained in a suitable vessel 1 pint of strong French brandy. Then mix all together and allow the whole to macerate with frequent shaking, while the following liquor is being prepared, viz: Boil 2 pounds hogs liver for 12 hours in 1 gallon of water, adding sufficient additional water from time to time to keep up the quantity to 1 gallon; mix the boiled liver thoroughly with the water, strain through a coarse sieve and add this to the mixture previously prepared.

Laxative Cascara Syrup.—T. S.—The first step in the preparation of a syrup of this character is the formation of a water miscible and aromatic extract of the drug. This may be prepared as follows:

Oil cinnamon.....	3 i
Oil cloves.....	3 ii
Oil nutmeg.....	gtt lxxx
Tincture tolu.....	fl ℥ iaa
Tincture ginger.....	fl ℥ xii
Bitterless extract cascara.....	fl ℥ xvi
Carbonate of magnesium.....	fl ii
Water enough to make.....	Oilv

Triturate the oils, tinctures and fluid extract with the carbonate of magnesium, gradually add water, and pass water through the filter to make four pints.

To make the syrup for the fountain, take	
Cascara extract (as above).....	fl ℥ vi
Flavoring extract orange.....	fl ℥ ii
Syrup.....	Cong i
Foam extract.....	3 i

Color with caramel if necessary.

—O—

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College Place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25, 1904.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Seventh Series of Questions.

61.—Cork or suberous tissue consists of parenchyma cells, the walls of which

have undergone the suberous modification. It is commonly formed beneath the epidermis of woody stems and roots, and ordinarily soon replaces the latter. It is also formed over the surface of wounds during the healing process. The cells are usually tubular in form, very compactly arranged in radial rows and at maturity lose their protoplasm, becoming filled with air.

62.—Gum is among the carbo-hydrates found in solution in the cell sap. It is closely allied to starch and in some cases at least derived from it. True gums are usually produced in the sub-cortical layers.

63.—The primary form of the cells appears to be that of a sphere or spheroid. But commonly they acquire forms quite different and the shapes are various. This may be due to mutual pressure, unequal growth, etc.

64.—Parenchyma: The tissues of this series are less modified, in shape at least, from the primitive or typical form of cells than the other tissues. They mostly retain to maturity the proper character of cells. That is, they possess protoplasm and a nucleus, and possess the power of cell division. In some cases they become elongated and somewhat fibrous in appearance, but more commonly they are not much longer than broad, and have their ends square or rounded, rather than oblique or tapering. Parenchyma proper, or soft tissue, is the most abundant and least modified of all vegetable tissues. The cell-walls are thin and frequently composed of unmodified cellulose. The cells are commonly spheroidal or polyhedral in form. It includes most of the soft tissues of plants such as the green cells of the leaf, thin walled cells of the pith, a portion of the cells of the bark and frequently those of the medullary rays, etc.

Prosenchyma: To this series belong those tissue elements or cell derivations which at maturity, lose their nucleus and protoplasmic contents and therefore their cellular characters, and have their walls thickened by secondary deposit.

They sometimes contain starch and proteid matters, but take no active part in the nutritive processes of the plant. They serve it mainly for strengthening and support, and have therefore been called mechanical tissues. They are serviceable also in conducting the sap. The elements of these tissues are generally elongated and oblique ended or taper pointed, though exceptions to the rule are not wanting.

Wood cells are examples of prosenchyma. They are compactly arranged, long-fusiform in shape, rarely forked or lobed at one or both ends, more or less compressed laterally by mutual pressure, and are so placed together as to splice one over the other like the fibres of a rope, forming a hard, strong tissue.

65.—The great majority of the higher plants absorb inorganic salts from the soil in aqueous solution by means of their innumerable delicate roots and root hairs.

These salts are conveyed through the membranous cell walls of these organs by liquid diffusion and osmosis, and thus find their way into the interior of the plant.

66.—On the outside of each annual zone a layer of vitally active cells is placed, called the cambium-layer. It is from these cells that the new layers of wood are formed and from the fact of the cambium layer being situated on the outside of the vascular bundles of which the wood is composed, these bundles owe

their continuity and indefinite power of increase.

The cells of which the cambium layer is composed are of a very delicate nature, and consist of a thin wall of cellulose, within which is a primordial utricle, a nucleus and abundance of protoplasm. These contents were formerly known as present in young growing cells. These contents were formally known under the name of cambium and thence the origin of the same "cambium layer" applied to this portion of the stem. The layer is dormant during the winter, but is in full activity in the spring.

67.—The stem at its first development consists entirely of parenchyma, but in a short time fibro-vascular bundles are developed in this parenchyma, by which it becomes separated into two portions, an internal or pith, and an external or bark. The separation is not complete, the two being connected by tissue of the same nature as themselves, to which the name "medullary rays" has been given.

As new layers of wood are formed new additions are made to the ends of the medullary rays, by which means the pith and bark are always kept in connection.

68.—Galls are excrescences on *Quercus lusitanica* Webb, rar, infectoria De Candolla, Nat. order Cupuliferae. Caused by the puncture and deposited ora of the insect cynips *Gallae tinctoria* Olivier. They contain 50 per cent. of tannin.

69.—Fixed oils are particularly abundant in certain fruits and in many seeds. Volatile oils are mostly found in flowers and leaves. Are often excreted along with resins into secretion reservoirs.

70.—Resins are produced in special cells on the surface of plants or in internal cells. They occur in different parts of the plant. In some the incisions are made in the stem—some in the root—some in the trunk of the tree, wherever the resin is most abundant.

Names of Students Whose Grade Stood Seventy-five on the Fourth, Fifth and Sixth Series.

H. J. Barber, Alton, Ontario, Canada.
John W. Brewer, Lake Preston, South Dakota.

Frank Hartman, Middletown, Conn.
Chas. J. McCloskey, Jersey City, N. J.
Thos. W. Murphy, East Bradley, Pa.
W. A. Sichel, Snow Shoe, Pa.
Arthur J. Smith, Boonville, Mo.
C. P. C. Timberman, Alexandria, Va.

We note that J. H. Brenneman of Harrisonburg, Va., who was one of the prize men in the first series of our Quiz Box questions, passed a successful examination before the Virginia Board of Pharmacy at its last meeting in Richmond.

Names of Students Whose Grade Stood Seventy-Five on the Seventh Series.

H. J. Barber, Alton, Ontario, Canada.
Frank Hartman, Middletown, Conn.
Chas. J. McCloskey, Jersey City, N. J.
Thos. W. Murphy, East Bradley, Pa.
Arthur J. Smith, Boonville, Mo.
C. P. C. Timberman, Alexandria, Va.

Questions: Ninth Series.

LATIN TITLES.

91.—How many declensions are there in Latin, and what are their respective terminations in the genitive singular?

92.—What class of nouns belong to the first declension and what are the nominative and genitive endings of these nouns, both singular and plural? Give ten examples of names of drugs belonging to this declension.

93.—What class of nouns belong to the second declension, and what are the nominative and genitive endings of these, both singular and plural? Give ten examples of names and drugs belonging to this declension.

94.—What are the usual nominative terminations of nouns of the third declension? Give the genitive singular and plural for each of the several nominative terminations named. Name ten examples of nouns belonging to this declension.

95.—What are the nominative and genitive endings, singular and plural, of nouns of the fourth declension? Give four examples from pharmaceutical nomenclature.

96.—To what declension does the word species belong, and what is its genitive plural?

97.—Why are the names of drugs, etc., written in the genitive in prescriptions?

98.—What are the terminations of adjectives for the comparative and the superlative degrees, in the (a) masculine or feminine form, (b) neuter form?

99.—Give the Latin equivalents for twice, thrice, simple, double, triple and quadruple.

100.—Like what class of words are the ordinals declined in Latin?

101.—Give the nominative, genitive and accusative, both singular and plural, of the Latin equivalents for one, two and three.

:o:

Students' Column.

Organic Materia Medica of the U. S. P.

[Continued from Page 302.]

Hyoscyamus. Hyoscyamus, Henbane.

BOTANICAL NAME.....Hyoscyamus niger.
NATURAL ORDER.....Solanaceae.
HABITAT.....Naturalized in North America from New England States to Michigan.
CONSTITUENTS.....Fixed oil; alkaloids; hyoscyamine; pseudo-hyoscyamine; hyoscyne; glucoside—hyoscyipicrin.
PROPERTIES.....Sedative, anodyne and narcotic.
PARTS USED.....The leaves and flowering tops collected from plants of the second year's growth.

Dose—Ext. Gm. 0.10 and up.; Ext. Md. Cc. 0.30—0.60; Tinct. Cc. 2—4.

Ichthyocola. Isinglass.

ZOOLOGICAL NAME.....Acipenser Huso and other species.
CLASS.....Pisces.
ORDER.....Sturiones.
HABITAT.....Black and Caspian seas and their tributary rivers.
CONSTITUENTS.....Gelatin, membranous matter and some salts.
PROPERTIES.....Used externally as protective to the skin; internally is emollient and nutritive. Used as a test to distinguish gallic from tannic acid, giving with the latter a yellowish-white precipitate.
PARTS USED.....The swimming bladder or air bag.

Illicium. Illicium, star anise, Chinese anise.

BOTANICAL NAME.....Illicium verum.
NATURAL ORDER.....Magnoliaceae.
HABITAT.....China and Japan.
CONSTITUENTS.....Volatile oil.
PROPERTIES.....Carminative, stimulant.
PARTS USED.....The fruit and oil.

Dose—Oil Cc. 0.15—0.40

Inula. Inula, Elecampane.

BOTANICAL NAME.....Inula Helenium.
NATURAL ORDER.....Compositae.
HABITAT.....Native of Central Asia and Southern Siberia; grows wild in United States from New England south to the mountains of North Carolina and westward to Illinois.
CONSTITUENTS.....Volatile oil and alkaloids, inulin and helenin.
PROPERTIES.....Stimulant to kidneys and uterus.

PARTS USED.....The root.

Dose—Gm. 0.60—1.30.

Ipecacuanha. Ipecac.

BOTANICAL NAME.....Cephaelis Ipecacuanha.
NATURAL ORDER.....Rubiaceae.
HABITAT.....Matto Grosso in Brazil and other parts of South America; cultivated in India.
CONSTITUENTS.....Important constituents, emetine and ipecacuanhic acids.
PROPERTIES.....Emetic, expectorant and diaphoretic.
PARTS USED.....The root.
Dose—Ext. Md. Cc. 0.30—2.00; Pulv. Ipecac et opii gm. 0.60—1.30; Troch. Ipecac 1—4 Troch. morphet Ipecac, 1—4.

Iris. Iris, blue flag, water flag.

BOTANICAL NAME.....Iris versicolor.
NATURAL ORDER.....Iridaceae.
HABITAT.....United States.
CONSTITUENTS.....Starch, gum and acrid resinous matter.
PROPERTIES.....Emetic and cathartic; hepatic stimulant.
PARTS USED.....The rhizome and roots.

Dose—Ext. Gm. 0.15—0.30; Ext. Md. Cc. 0.60—1.20.

(To be continued.)



The Military Pharmacist.

Editor AMERICAN DRUGGIST:

The present degraded position of pharmacists in our army and navy is simply the result of the members of the pharmaceutical profession lying supinely on their backs these many years, and saying "we can't help it." We can help it!

Yet we do not feel that such a tremendous effort will be required, our congressmen and senators are certainly able and intelligent men and the matter if properly presented to them will not fail to secure the attention it deserves. A pharmacist requires many years of hard study to perfect himself in his profession. To secure the degree Ph.G. requires as much work and study as to secure that of M.D.

The pharmacist must be competent and careful, and guard the patient not only against his own mistakes but also against those fatal slips of the pen or mind which physicians sometimes make. He actually holds the life of the patient in his hand. He should be required to be competent, and the price for a competent man should be paid.

A pharmacist or apothecary in the navy should rank with a passed assistant surgeon with the relative rank of lieutenant, junior grade, receiving a salary at sea of \$2,000, on shore duty of \$1,700, on leave or waiting orders of \$1,400. (See pages 610 and 620 of the Blue Book). In the army he should rank with assistant surgeons with the rank of first lieutenant, salary \$1,600 See Blue Book, pages 492 and 514.

The pay of the apothecary is now \$720 in the navy, this is at the rate of \$2.00 per diem (the pharmacist is expected to work any time day or night), if we count Sundays as work days, and all pharmacists do. We will quote a few extracts from the Blue Book:

NAVY YARD, BOSTON.

Sailmakers.....	\$3.04 a day
Engine tenders.....	2.80 "
Riggers.....	3.04 "
Fasteners.....	2.70 "
Shipwrights.....	3.28 "
Rope makers.....	3.04 "
Draughtsman.....	4.00 "
Master sail makers.....	5.00 "
Clerks \$1,300 to \$2,000 a year.	

We only give these as a sample of the figures. Ordinary clerks appear to be

valued as worth two or three apothecaries any time, laborers secure from \$3 a day upward and skilled mechanics more in proportion. The profession is entitled to the rank and the salary of assistant surgeons. If we cannot get the salary, we should at least be able to get the rank. But with so just a cause we certainly ought to be able to secure both. We thank you in the name of the 150,000 pharmacists of the Union in your efforts to aid us in changing this degraded position of our profession to a higher plane in our army and navy.

GEORGE F. PAYNE, M.D., Ph.G.
ATLANTA, Ga.

Dr. Rice on the Military Pharmacist.

Editor AMERICAN DRUGGIST:

Dear Sir—I have read Dr. Payne's communication entitled "The Military Pharmacist," of which you sent me a proof with the request of commenting on it. I would say regarding it that, for the last twenty-five years at least, the pharmacists of the army and navy have striven to have their pay increased, as well as the position or rank advanced. They have appealed to every influential medical and pharmaceutical body to advocate their claims, and nearly every one of these bodies complied with their wishes and passed a resolution to that effect. But no success has attended the efforts so far. The reason is simply this, that not enough interest has been created in favor of the matter in the only place where it can attain success, that is in the Congress. If the members of this branch of the army and navy can induce the Secretary of the Navy to make the recommendation and to include the increased pay in his estimates, and if the Naval Committees of the House of Representatives and of the Senate, by a majority of each, approve of the measure, the thing is done. There is no other way. And to create the necessary interest, it is not sufficient to send petitions or resolutions passed by societies, colleges, associations, etc., but to bring pressure to bear upon the members of the Committees through men of influence who can personally present the claims in a manner which will make their justice evident.

NEW YORK.

CHARLES RICE.



Written for the
American Druggist and Pharmaceutical Record.

How to Make and How to Circulate Them.

By NATH'L. C. FOWLER, JR.

There must be catalogues.

The commercial definition of a catalogue is a printed something which describes something.

A catalogue must tell the whole story, briefly if possible, of the article presented.

It must present its advantages, and if it be an honest catalogue it will announce its disadvantages.

The maker had better tell the public what he has not been able to perfect, for by so doing he will counteract counteracting argument.

The maker can better talk against his article than can the consumer.

Somebody will talk against it anyway.

Let the manufacturer do the most of this talking.

A catalogue writer, if he knows anything, will present the advantages in their most perfect light, and the disadvantages in a somewhat darkened light, but he will present the latter, and will give reason for their existence.

As the majority of catalogues reach non-technical readers, even the scientific catalogue should not be too technically scientific.

Sometimes technical terms must be used, but they need not be over-used.

A manufacturer has no right to suppose that because he knows all about his article an outsider can understand it by his description of it.

Even if a catalogue is to reach only experts, there is no reason why it should be crowded with technical terms when plainer English will tell the story as effectively.

As the manufacturer does not know where his catalogue goes, as its circulation after it leaves his office is beyond his control, he should make the catalogue intelligible to the scientific reader, if it be a scientific catalogue, and intelligible to the reader who has not the technical education, because by so doing his catalogue will serve a double purpose.

A catalogue should never contain illustrations unless the illustrations are able to do justice to the goods illustrated.

Better have nothing but plain text, if that text be well written, than pictures which give no adequate idea of the article presented.

If the illustrations be other than outline, they must be printed upon first-class paper with first-class press work.

The explanation of a picture should be on the same page as the picture, or on the page facing it.

The reader should never be obliged to hunt to find out what a picture means.

Every paragraph should be complete

in itself, even if it necessitates repetition.

There should be few, if any, references to other pages.

The reader should be allowed to understand the catalogue without learning the catalogue.

The catalogue should be a text book, and no text book that is good for anything is objectionably disconnected.

A catalogue should contain a very brief preface.

Once in a great while a man is discovered who likes to read a preface, but generally that man hasn't cash enough to buy a paper of hairpins.

SEE THERE IT'S ALL TRUE!



A SUGGESTION.

There is no use in announcing "We beg leave to present."

What's the need of wasting good white space in telling a self-evident fact.

The title page of a catalogue should not be plastered over with names of officers and directors.

The cover of a catalogue should not contain advertising.

The cover should present only the title, with or without decorative illustration, and the cover illustration should never be of a technical character.

A catalogue should never be sent to promiscuous lists of names, and should seldom be sent to anybody, unless it is asked for.

A catalogue should be sent to inquirers, and generally it is inadvisable to demand a stamp for it, because the effort necessary on the part of the asker is all the pay he is expected to give for a thing which is supposed to be more in your interest than in his.

If a catalogue does not contain too many articles, and is to give prices, let those prices appear with the descriptions. Don't crowd them into the back of the book.

Something for nothing isn't business, never was business, and never will be business.

Advertise the catalogue, and say you will send it for a postal card request, and if the catalogue be an expensive one, generally accompany it with a personally written letter.

The trade paper offers a legitimate means for the circulation of catalogues.

The catalogue should be extensively advertised in it and sent to all who ask for it.

There is no objection to requesting the askers of catalogues to give you the names of others who might like to receive it, and in that case, you should send a personal letter to those parties, stating that you send the catalogue at the request of another party.

Catalogues, if not too expensive, should be given free to anyone who asks for them.

Generally one can afford to give away as many catalogues as people ask for or send for, for if the receiver does not buy the goods himself, he is liable to place the catalogue somewhere where somebody who wants the goods may see it.

If a concern issues a very expensive catalogue, it should have a supplementary catalogue, and should push the circulation of the smaller catalogue, and in that smaller catalogue announce that under certain conditions the larger catalogue will be sent.

Make your catalogue readable anyway.

No matter what it treats of, let it handle its subject as a writer would present it, disconnected from your business, and let your business be brought into the catalogue as a necessity.

This is almost always possible, although it may be seen impossible to the average catalogue compiler.

A catalogue is a legitimate book of information upon the subject it illustrates, and it should be valuable to buyers of the goods it presents, whether such buyers buy of you or of somebody else.

If a catalogue is only of value to you, it is of little value to anybody else.

Do not understand that I recommend that a catalogue be so much of a book that your goods are not properly presented, for there is a way of making your goods a part of the book without hurting the book, and there is also a way of making your goods so prominent that the catalogue is nothing more or less than a collection of hand bills, announcing the goods you have, of interest to you and of no interest to the buyer.

Always remember you are writing the catalogue for the receiver, not for yourself; that something of interest to you may not interest others, and that your catalogue should have intrinsic value, which will force the receiver to preserve it, and he will not keep a book which is a medley of bald headed advertisements, with so much advertising in them that one cannot discover anything worth reading.



NEW YORK.

Pryor & Cameron, 322 Ninth avenue, have recently treated their store to new paint, counters and soda fountain.

Jas. C. Field, Somerville, N. J., has secured the contract to supply the State prison at Trenton, N. J., with drugs and sundries for the next year.

T. C. Donald, who has been engaged in the drug business in New York for some time past, has opened a store at 146 Mill street, St. Johns, N. B.

L. C. Franz, the popular representative of Theo. Ricksecker, has recovered from a serious illness, and is now visiting his customers in the State of Maine.

John H. Van Denuser, New Brunswick, N. J., has built and moved into one of the handsomest stores in New Jersey. Among many new features is a Low Art Tile soda fountain.

Fox, Fultz & Webster have made a number of alterations in the arrangement of their New York branch at 52 Park Place. The office has been enlarged and greatly improved in appearance.

Albert Schultz, the manager of Hege-man's Third Avenue Pharmacy (Third avenue and 31st street), has returned to his duties after a pleasant vacation spent with his parents at their home in Scranton.

Kent's drug stores in Paterson, N. J., have changed hands and are now conducted under a partnership arrangement by G. E. Pellett and W. Burrows, the former having charge of the establishment at 236 Main street, and the latter the store at 159 Main street.

A new pharmacy has been opened on 116th street near Eighth avenue, by J. M. Reichert. The glass fittings, labels, etc., were supplied by Whitall, Tatum & Co., and the soda fountain by Matthews. Mr. Reichert is now the owner of two stores, his other place being located at Columbus avenue and 125th street. The pharmacy at the 116th street elevated railway station was opened on the 22nd inst. Its appearance is particularly imposing and attractive. There is an entrance to the store direct from the elevator and a good transient trade is counted on. The store at One Hundred and Twenty-fifth street will be continued as heretofore.

The trade will learn with regret of the death of Mr. Geo. C. Hallett. The deceased was originally of the firm of Dixon, Clarks & Hallett and subsequently of Hallett, Seaver & Burbank. Later he filled the position of cashier with Seabury & Johnson. During his active business career Mr. Hallett was held in high esteem by the members of the trade. His age was about fifty-eight years.

Noble & Drake have opened a new pharmacy at 1167 Niagara street, Buffalo, N.

Y. Chas. E. Noble, the senior partner, has been employed at Armstrong's pharmacy as chief prescription clerk the past six years. Dr. A. I. Drake is a graduate of the Buffalo College. The fixtures and supplies for the new establishment were furnished by the following firms: Porter Farley, Rochester, quartered oak fixtures and show cases; A. D. Puffer Sons, only soda fountain; Clinton Pharmaceutical Company, tablets and fluid extracts; Dawes Mfg. Co., show globes, shelf bottles, etc.; F. S. Hubbard & Co., sundries and patent medicines.

A few changes have occurred in the pharmaceutical department of the Vanderbilt Clinic. Rudolph Leonard has resigned the position of chief apothecary and is now making a tour of the principal cities of the European continent, Munich, Dresden, Leipzig, Vienna and Berlin. He will stay abroad for about four years and it is his intention while away to pursue a thorough and complete course in chemistry, under one of the German masters. L. C. Corbin, Ph.G. and M.D., formerly apothecary in the United States Navy, succeeds him as chief apothecary in the Vanderbilt Clinic. John R. F. Wall, who graduated in the class of '92 of the Brooklyn College of Pharmacy, is the senior assistant.

Wm. H. Ebbitt, W. H. Schieffelin & Co.'s well-known city salesman, is taking on quite a Sherlock Holmes appearance of late. Our representative discovered him on Fulton street the other day in a noticeably abstracted mood. His face wore that 'inscrutable expression' which Conan Doyle has made us all so familiar with in his famous 'Memoirs of Sherlock Holmes' and the A. D. & P. R. man did not require to be told that a problem, involving the bringing to justice of some offender against society, was in process of solution by the genial salesman. Inquiry developed the fact that Mr. Ebbitt's house had been recently visited by burglars and that Mr. Ebbitt was making a quiet little investigation on his own account, with a view of recovering some of the stolen property.

It is not generally known that membership in the New York city branch of the Interstate Druggists' League includes the advantage of free legal advice. Leopold Leo, attorney and counselor, 145 Broadway, is authorized to advise members, under the following revised sections of the Constitution and By-Laws, to wit:

Section 1. The League shall retain a legal adviser whose duty it shall be to advise and legally protect the interests of its members.

Sec. 2. Any member in good standing, upon presentation of his membership card, may consult the League's attorney upon subjects of interest to himself, but no action shall be taken in any such matters until the executive committee shall have been notified and their approval obtained.

HE CALLED HIS BLUFF.

Paul Junck, a well-known Hoboken druggist, has sold his business at 304 Washington street, to Charles H. Schmidt, a New York druggist, doing business at Seventy-fourth street and Amsterdam avenue. The sale was perhaps one of the quickest of its kind that has been made in Hoboken. Mr. Schmidt visited Mr. Junck one Sunday. In the course of conversation Mr. Schmidt asked Mr. Junck if he would sell out. The answer was:

"I am not anxious to sell, but will if I get my price."

"What is your price?"

Mr. Junck stated a price, little thinking at the time that Mr. Schmidt would buy. The subject was dropped for the time being and nothing more mentioned.

Last Wednesday Mr. Junck was somewhat surprised to see Mr. Schmidt in the store. The New Yorker said:

"Good afternoon, Paul. I have come to buy you out," at the same time producing the cash for the purchase. The papers were drawn up and the sale made.

The price paid for the business is not known outside of the contracting parties, but no doubt a good round sum was paid, as Mr. Junck had a fifteen years' lease on the store, which has been turned over to Mr. Schmidt.

The business will continue under the management of Wm. H. Reibel, who has been in Mr. Junck's employ for the past five years. Mr. Schmidt will devote his time to the New York store, which, it is said, he will sell at the first opportunity and take up his residence in Hoboken.

Interstate Retail Druggists' League.

The New York County Branch of the Interstate Retail Druggists' League held their regular semi monthly meeting on Friday, November 16th, at 8 P.M., in the Mott Memorial Hall, 64th street and Madison avenue. President Rontey occupied the chair, and there was a good attendance of members and visitors.

TO DISCOURAGE THE SALE OF NEW NOSTRUMS.

In opening the proceedings Mr. Rontey emphasized the necessity of members upholding the principles of the League plan. He spoke of the efforts which a certain manufacturer had made to induce him to purchase a certain proprietary compound direct from the maker, stating that the manufacturer in question had offered his goods on consignment with the privilege of paying at the expiration of twelve months. He said:

"The scramble for positions in the proprietary medicine world is in some respects utterly indecent. Every man with spare capital seems to think there is a bonanza in the exploitation of patent medicines, so that new compounds are constantly being sprung upon an unsuspecting public. It is my conviction that retail druggists should make it a point to discourage the sale of new nostrums."

C. S. Erb counseled moderation and expressed it as his opinion that it would be extremely inadvisable to antagonize the manufacturers of proprietaries, particularly at the present time when the League is engaged in soliciting their aid.

NOT SOLICITING THE AID OF MANUFACTURERS.

The president said that Mr. Erb was in error in supposing that the manufacturers had been approached for pecuniary assist-

ance. While the League welcomed their encouragement and support, it was not their intention to make any direct appeals for aid. The manner in which the approaches of the president of the League had been received at the last meeting of the N. W. D. A. had proved such a rebuff that Mr. Canning had felt justified in acting independent of the proprietors, and in looking for the support of the jobbers instead.

Referring to the efforts which certain manufacturers are making to induce retail druggists to deal direct, Mr. Rontey advised the members against accepting any such offers, but on the contrary to throw the weight of their influence with the League and be guided by the directions of its officers. "Each individual member," he said, "as well as all the branches should work hand in hand with the League."

Vice-president Barnaby suggested that all League members should be instructed to purchase all supplies of proprietary medicines through the regular jobbing drug houses only.

TO SUPPORT THE WHOLESALE.

Mr. Rontey asked if Mr. Barnaby would put his suggestion in the form of a resolution. Mr. Barnaby consented, and while the resolution was being drafted, Ernest Molwitz, of the Board of Directors, entertained the members by reciting some of his experiences with a few enterprising vendors of proprietary medicines and specialties. He said every druggist should make it a point to discourage the sale of new proprietary articles, and especially those which are sold in dry goods stores. He said:

"Let every druggist put up his own goods and adopt distinctive labels for them. I make it a practice not to buy any new proprietary compounds until a good demand has set in. The flood of corn cures, cough balsams, soothing syrups, headache powders, etc., shows no sign of diminishing and it is high time that druggists took a decided stand and refused to further encourage their manufacture."

Secretary Morrison was of the same opinion and said:

"Druggists should not take any goods on consignment. The taking of goods on consignment is what leads to the accumulation of dead stock."

Mr. Barnaby's resolution was then read as follows:

Resolved: That the members of the New York City Branch of the Interstate Retail Druggists' League disapprove of purchasing patent or proprietary medicines from the manufacturers direct; and that we express our confidence in the plan of the Interstate League which distinctly stipulates for the distribution of proprietaries, etc., through the wholesale and jobbing drug trade; and that this resolution be made public through the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD and other drug journals.

The resolution was put to the meeting and adopted unanimously.

In answer to the question of a member, Mr. Rontey explained that the object of this resolution was to show the wholesale and jobbing drug trade that the members of the league were in sympathy with them. He thought it would also strengthen the hands of President Canning in his efforts to adjust satisfactory relation between the wholesaler and retailer.

A member asked whether the resolution would prevent members from purchasing direct from firms like Seabury & Johnson, who give a special discount to large buyers. Mr. Rontey said the resolution was not designed to interfere with large buyers.

PRESCRIPTIONS FILLED AT DRY GOODS STORES.

One of the members created a slight ripple of excitement at this point by asking

if there was any law to prevent physicians from prescribing patent medicines and directing patients to have the prescriptions filled at a drygoods store.

Mr. Rontey explained the provisions of the Penal Code and quoted sections of the Consolidation Act which seemed to show that a conviction could be secured only upon evidence that poison in bulk had been dispensed by an unregistered dealer. He stated that the Board of Pharmacy is powerless to prosecute a drygoods man who sells poison in the shape of proprietary medicines.

It came out in the course of discussion that the physician who was guilty of prescribing medicines in the manner complained of, was a Dr. Alfred H. Smith of Eighth avenue, and the place of supply was named as Walton's dry goods store on Eighth avenue.

One member suggested bringing the matter to the attention of the Academy of Medicine, while another was of opinion that the Board of Pharmacy was competent to deal with it. M. F. Bender took an opposite view to that expressed by many of the previous speakers and disturbed their equanimity greatly by declaring that the more we corner the jobbers the quicker will we bring them to terms.

The Committee on Organization reported through its chairman, C. S. Erb, who stated that over 89 per cent. of the druggists of New York city had now subscribed to the League plan. The city is now divided into five districts in charge of the persons named as follows: all that district south of 14th street in charge of N. Tauszig; above 14th street to 180th street, on the west bounded by Fifth avenue in charge of Thomas Latham; the district west of Fifth avenue, from 14th street to 180th street in charge of C. S. Erb; the district above 180th street, east of Fifth avenue to the county line in charge of T. B. Breen; the district above 180th street, west of Fifth avenue to the county line, in charge of John Loettel.

Professor Luther F. Stevens was asked to address the meeting, and made a few telling remarks on the value of organization. He said affairs in Brooklyn were progressing favorably, and though some difficulty was experienced in getting the members in motion, once going they could be depended upon.

After a somewhat protracted discussion as to the advisability of inviting the druggists of Queens County to become members of the New York Branch, it was resolved on motion of Ex-president C. A. Osmun, that the druggists of the county mentioned be extended an invitation to join the New York city branch. This motion was seconded by Mr. Barnaby, and carried unanimously. The meeting was then adjourned, to come together again at the same place and time, on Friday, December 7.

New Hampshire Commission of Pharmacy.

The following named candidates passed a successful examination before the New Hampshire Commission of Pharmacy, at the regular quarterly meeting in Manchester, on Wednesday, Oct. 24th. As pharmacists: William M. Morton, of Portsmouth, N. H.; Nathaniel A. Wheeler, of Walpole, N. H., and Fred A. Gonya, of Portland, Me. As registered assistant, Fred W. Tilton, of Exeter, N. H.

The meetings of the New Hampshire Board are held on the fourth Wednesday in January, April, July and October, in Manchester, N. H.

MASSACHUSETTS.

Boston, Nov. 20.—The ninth annual report of the State Board of Registration in pharmacy, which covers the period from October 1, 1893 to October 31, of the present year, has just been handed to the governor. A perusal of the same shows an increase in the number of examinations over last year of 117; the total number examined being 661. From the standpoint of success, however, a decrease is seen; a trifle over 19 per cent. being passed this year as against about 24 per cent. in 1893. The board, since its organization, has examined 8044, of which 956 have been passed.

The law makes no limit to the number of examinations or age of applicants; one young man only 17 years old claims the right to examination and certificate if "found qualified" and another man has had 15 examinations, failing each time.

THE STATISTICS OF THE YEAR'S WORK.

Here is a detailed statement of the time and results of the examinations:

1893.	Examined.	Passed.	Rejected.
Oct. 3, 4, 5.....	38	8	30
Oct. 24, 25, 26.....	42	9	33
Nov. 14, 15, 16.....	45	10	35
Dec. 6, 7, 8.....	43	8	35
Dec. 19, 20, 21.....	44	16	28
1894.			
Jan. 2, 3, 4.....	42	5	37
Jan. 23, 24, 25.....	38	4	34
Feb. 13, 14, 15.....	38	8	30
March 6, 7, 8.....	46	11	35
March, 27, 28, 29.....	43	6	37
April 10, 11, 12.....	39	8	31
May 1, 2, 3.....	40	4	36
May 22, 23, 24.....	43	9	34
June 17, 18, 19.....	45	7	38
June 19, 20, 21.....	43	8	35
Sept. 18 19, 20.....	32	5	27
Totals.....	661	126	535

The financial statement is interesting. The board commenced the year with \$397.90; examiners contributed \$2,329; twelve duplicate certificates netted \$10; total receipts for 1893 '94, \$2,899; total amount in State treasurer's hands, \$2,786.20.

Drafts have been made as follows:

	Services.	Expenses.
H. M. Whitney.....	\$207 50	\$171 95
F. H. Butler.....	620 00	350 45
John Larrabee.....	180 00	46 95
A. K. Tilden.....	162 50	16 35
John A. Rice.....	195 50	230 06
Totals.....	\$1,335 00	\$815 76

Other expenditures foot up \$161.46, leaving a balance of \$223.98 on hand. Outstanding liabilities leave a net indebtedness of \$66.03.

Under the acts of 1893, 150 complaints were received. Twelve hearings were held, resulting in the revocation of seven certificates—four for violating the law, and three obtained by fraud. Four cases were suspended and one placed on file. The board deems a detailed statement of its hearings undesirable.

In nearly every case the board is importuned by friends, counsel and personal appeals, sometimes by threats of prosecution and absolute repeal of the pharmacy laws, and sometimes the board is told that money is no object if the board will "let up."

Out of 150 complaints received, four or five proved to be made from malice or envy.

The correspondence, special investigation, hearings, records and detail work in this department has required of the president the larger part of 170 days.

This is what the board has to say under the head of "Liquor certificates to Druggists:"

"There is no class of licenses so liable to abuse as the sixth. The druggist pays

only a nominal fee for his license; yet he may sell liquor at all hours of the day or night

"The number of drug stores now doing business is out of all proportion to the population of the city. The interests of the public require that hereafter greater care should be exercised in the granting of licenses of the sixth class

"The attention of wholesale dealers was called to the fact that the selling of liquor to so-called druggists in quantities so large as to indicate an illegal business, and the selling of liquor to kitchen bar rooms, were at least moral violations of the law, and would be likely to be taken into account on any license applications that might be made by them in the future as bearing on the question of fitness to receive a license.

"Much of the responsibility for illegal selling can justly be placed on wholesalers. The dealer who encourages the whiskey druggist or the kitchen bar room by willingly supplying them with the means of violating the law, ought not to be regarded with favor.

"This is work, if done at all, that must be carried on without fear or favor, and as near absolute justice to all as it is possible for honest and fearless men to accomplish, and, as has been said, 'who can do it as well and advisedly as men appointed by your excellency to investigate complaints and enforce the pharmacy law.'"

The expense of this work is as follows:

Inspector or agent.....	\$224.98
Printing and postage.....	78.29
Clerical expenses.....	29.80
Board, services and expenses.....	201.24

Total.....\$527.71
Liabilities unsettled are estimated at \$200.

In closing, the report recommends: That examinations and registrations be one department; that the two departments known as "enforcing the law" and "granting liquor certificates" be merged into one, as the work, records and expenses are so intimately connected, and can be accomplished at less expense; that an annual appropriation be made for this work, so long as it shall be continued, subject to such uses and disbursements as the board may determine, and are approved by its president or secretary, and drafts made upon the State treasurer in the usual form for such portion as may be required, or the full amount of the proportion, if necessary.

The rapidly approaching work on the question of liquor certificates seems to demand as early consideration as possible; therefore, the board requests a hearing, if desired, as soon as possible after the Legislature opens.

The report of the agent is also submitted. Eleven notoriously bad stores were closed during the last two months. Seventeen raids followed by arrests or complaints have resulted in convictions.

He is convinced that there is an earnest desire on the part of the pharmacists to obey the laws and uphold the board in their enforcement.

A LETTER FROM MR. WHITNEY.

The following is a letter sent to the Governor by the chairman previous to his re-appointment.

To His Excellency Gov. Greenhalge: Dear Sir:—In transmitting this report to you I desire to add a few words of a personal character.

The delay in making an appointment upon this board evidences an opposition to the present incumbent and a desire on your part to secure the best successor.

Your kind and encouraging words for the board at the annual meeting of the Boston Druggists' Association led me to assume,

and I believe correctly, that you felt a deep interest in the work this board were doing.

Believing this to be the fact, and fully appreciating your desires and opportunities for making a wise selection, and also recognizing the fact that many of my friends are strongly urging my re-appointment, permit me to say that, while I am in no sense a seeker for the position involving as it does a personal sacrifice, I do not feel, that I have a moral right to decline in advance a service or duty, for which by experience or otherwise, those who ought to know insist I must continue.

Nine years of service on the board, a careful consideration of results attained, a clear recognition of the duties and responsibilities involved in the Acts of 1893 and 1894, and being perfectly satisfied that every moral, law abiding citizen, who places above personal and selfish ends a true and loyal regard for the elevated and progressive condition of the commonwealth, must earnestly commend and demand the continued and persistent work in which this board is engaged.

I therefore most respectfully beg and pray you will make the wisest selection you can, not regarding for a moment the mere fact of my present position on this board.

Very truly yours,

H. M. WHITNEY.

Boston, Oct. 10, 1894.

MR. WHITNEY IS INTERVIEWED.

After his confirmation Mr. Whitney gave out the following to the press:

"The time that I give to this work is a great tax upon me, for of course my position makes it necessary that I bear the brunt of the labor.

"I would be more content to give my time to my business, but I feel that the work of the board ought to be carried on as it has been planned.

"My colleagues and myself give a great deal of time to our duties here and are handicapped by lack of sufficient appropriation, but we take interest in doing the important work of the board in order that the State may be benefited.

"We have striven to correct many abuses—I think I may say with a fair show of success—but there are rascals in the drug business who need looking after constantly. The new law has opened an avenue for great good."

DEAD MEN'S SHOES.

Fall River seems to be a fertile field for the agent of the board of pharmacy who has unearthed another "drug store" which has been run fraudulently and which has been made to succumb to the law. The certificate of the late Henry L. Bliss is responsible for the trouble. When Bliss died this document was secured by Philip D. Carter, colored, who immediately concluded that the name upon the certificate was good enough for him, at all events he assumed that cognomen. Subsequently Walter O'Meliah met the man of color and on the strength of his certificate employed him. O'Meliah and Carter then applied for a license which they afterwards received. Business was then engaged in, but not of the legitimate kind. Agent Harris learned of this state of affairs and first questioned Carter about the matter who at first denied that there was anything wrong, but he confessed later. Both O'Meliah and Carter were then arrested; guilty and \$100 fine with three months for contemplation and labor was what the court meted out to each defendant. The police then brought charges of illegal liquor selling and O'Meliah was fined another \$100 with an additional three months; Carter was only fined \$65. An appeal was taken from all these convictions.

PROPRIETORS SUPPORT THE LEAGUE PLAN.

President Canning has received two more contributions to the Interstate League fund. One is from C. W. Snow & Co. of Syracuse, N. Y., for \$25; the other comes all the way from Atlanta, Ga., the Bradfield Regulator Co. being the contributors. The amount sent by this firm was only \$10, but it was supplemented by the statement that this sum would be added to generously as soon as the league commenced the work of organization in the district where the firm's goods are handled.

MEETING OF THE OIL, PAINT AND VARNISH CLUB.

After a long vacation the monthly meetings of the Paint and Oil Club have been resumed. The dinner of the present month was the first on the calendar. D. W. Strauss, the newly-elected president, occupied the chair and opened the evening's exercises with a short address. The by-laws were so amended that hereafter the club will meet on the second Wednesday of each month at 5 o'clock P. M. Jacob W. Hoffman was elected a member of the pricing committee. Charles Richardson urged the necessity of a national bankruptcy law and compared the Torrey and Bailey bills, favoring the former. Others joined in the discussion, and \$100 was voted for promoting the passage of the Torrey bill. Other speakers were Rev. Nehemiah Boynton, Jacob W. Hoffman, W. J. Jenkins and C. Henry Cutler, of Chicago, who invited the members to participate in the next annual convention, which is to be held in his city next summer.

MATZOON IN COURT.

In the United States Circuit Court, recently, Judge Carpenter heard the application made by the complainant in the equity case of Markar G. Dadirrian of New York against Gamaliel M. Yucubian of this city and the Y. T. Matzoon Company et al. of Chicago for a preliminary injunction. The plaintiff asks that the defendants be enjoined, pending the final determination of this case, from an alleged infringement of a trade mark, No. 12,556, granted him Sept. 6, 1885, upon the symbol "Matzoon" for use in the sale of a medicinal beverage, made from fermented milk. The defendants deny that they infringe upon any rights of the plaintiff. The court heard counsel and then denied the motion.

NEWS NOTES.

M. C. Groll, M. C. P., '92, is now head clerk for J. D. Knowlton, 1181 Washington street.

Dr. Horace L. Bowker died at his home in Roxbury on Nov. 21st at the age of 62. Dr. Bowker has been in ill health for some two years past.

J. Scates, of Portland, is giving to his customers silver-plated spoons with a picture of the Memorial Library of the city inscribed in the gold-plated bowl.

The store of Everett S. Dodge, Broadway and Salem streets, Maplewood, was raided a short time ago by the Malden police, who secured a half pint of whisky as a reward for their vigilance.

Hon. E. G. Frothingham is returned to the Senate this year by the largest majority ever given in his district. Senator Bessom, of Lynn, has also been re-elected by a handsome vote.

J. A. Bean, a popular clerk in Fitch's pharmacy, Concord, who has joined the corps of Benedicts, was recently presented by his fellow clerks and a friend with a handsome onyx clock. The presentation was made by J. R. Berry.

Mr. Charles W. Cheney, vice-president of the Doliber-Goodale Company, and super-

intendent of the Mellin's Food works, has moved from Cambridge during the past week and taken up his permanent residence in Brookline.

A. Hallett & Co., the enterprising druggists of Bath, Me., took possession of their new store on Main street November 17th. The fixtures, onyx fountain and smiling countenances of Messrs. Cox & Harris are worthy of note.

A banquet was given at Young's Hotel, on Monday evening, the 19th inst., to the advisory board of the Pharmacy Fair, at which a number of the representative wholesale and retail druggists were present. The prospects of the fair appear to be of the best, and all are enthusiastic about it. Messrs. Reeves and Johnson are now in New York in its interest.

One of The Hub's wholesalers is to occupy a seat in the House of Representatives. This is Albert C. Smith, of Smith, Benedict & Co., who is now receiving the congratulations of the trade upon his election. Mr. Smith has represented his ward in the City Council for a number of years with marked ability and his election to the Legislature is a well-deserved compliment and promotion.

"Jack" Jones, well known as manager of Resteaux's store on Tremont street, has been obliged to resign his position, owing to threatened ill health, which is a source of regret to the many friends of this popular clerk. Mr. Jones has gone to Denver, where the best wishes of hosts of people will follow him—wishes for his prosperity both as to his health and business. Mr. Jones's family will follow him later.

Miss Sarah A. Dana, of Wiscasset, Me., died suddenly at her home in that city Nov. 9th, having attained the age of seventy-one (71). Miss Dana was one of the oldest registered pharmacists in the State of Maine. She was registered August 17, 1877, her number of registration being 178. After her father's death some years ago, she took charge of the drug store established by him in 1880, and conducted it with great success until her death. Her store was situated on Main street, Wiscasset, Me.

The late Joseph Burnett was lovingly remembered at Southboro on November 11th by impressive memorial services. This was the date when Mr. Burnett would have reached his seventy-fourth birthday. The services were held in St. Mark's Church, which structure, with the land on which it stands, was the gift of the deceased. Rev. Waldo Burnett, a son, is the rector of the church. Rev. George S. Converse, D.D., arch-deacon of the Episcopal diocese of Boston, delivered the memorial sermon.

The Board of Registration in Pharmacy has just closed a three days' session, at which 41 applicants were examined. The number of successful candidates was unusually large, as shown by the appended list: Roy E. Mayo of West Gardner, John R. Collins of Haverhill, P. J. E. Lacroix, Alexander F. Patol, William M. Curtis and Harry F. Smith of Boston, Harry R. Parker of Lowell, Ernest F. Pope of Hudson, George Y. Sawyer of Canton, Charles Nelson of Cambridge, Wallace Macculm of Winthrop, John F. O'Sullivan of Lawrence.

The excellent work performed by Secretary Reeves in Vermont last summer, in organizing the retail trade of that State, has met with well-deserved appreciation as shown by the meeting of the Vermont S. P. A., held at Montpelier on October 31, when Mr. Reeves was elected to honorary membership. Mr. Reeves is pushing the League's work rapidly. F. W. Pierce, treasurer of Vermont Association, reports

to Mr. Reeves that he is fast getting the names of druggists in his section for both the V. P. A. and the League. Fall River has a local association, which is not particularly active, and Mr. Reeves will probably visit that city soon and endeavor to infuse new life into that body. He anticipates a call from Waltham, too, very soon. During a recent trip to Brocton and vicinity he found the prospect for an association excellent and expects to attend a meeting there shortly.

CONNECTICUT.

NEW HAVEN, November 21.—It is said the proprietors of several drug stores in the largest cities of the State, namely New Haven, Hartford, Bridgeport, Waterbury, Meriden, and New Britain are contemplating the renovation of their stores before a great while. Quite a number have been considering it for the past year, but on account of the depression, they have held back and waited for better times.

REFURBISH OR LOSE TRADE.

They begin to realize now that their stores are fast becoming "threadbare" and they probably are losing trade by not keeping the store up to the proper standard of appearance.

The enterprising proprietors also look at it in this light: that by renovating their stores and adding the latest fixtures—and in a word—keeping up to date, they will be able to draw considerable business from their competitors and also attract new trade which is created by improving the appearance of their stores. This extra business will more than compensate a druggist for any money that he may invest in this way.

There is nothing strange about a new, clean, bright and attractive drug store drawing trade from other stores and creating new business.

The druggist that has the spirit of enterprise that I have endeavored to describe is the one who has the most love for his business and who finds it a pleasure to perform the routine work of a pharmacy. But like every other business there are some in this line who are forever complaining about the state of business, saying that it is not as it used to be, and all that. These are the men who fear competition, knowing from past experience that they will lose trade because of the get-there spirit of the new comer. You ask them why they do not adopt new methods to bring their business to the front and they will look at you in unconcealed pity and say, "Well I have been in this place for 25 years and I guess I ought to know about my business." One would think that they did know their "business" not how to keep up with the procession.

In the drug business as in other business it is a case of the "survival of the fittest." The druggist who is enterprising, up-to-date and alive in his methods of conducting his business and has pharmaceutical ability is the man who is successful.

MINOR NEWS NOTES.

S. W. Smith's new drug store at Derby, is now completed and is open for business.

A \$1,000 soda water apparatus will be placed at the depot drug store at Greenwich very soon.

James P. Wood, of A. F. Wood's Sons, the druggists of New Haven, has been very ill with malarial fever.

At a meeting of the Drug Clerks' Association in Hartford, last week, the

new by-laws were reported by the committee in charge.

Druggist E. S. Tomlinson of South Norwalk believes in having novelties at his store to attract trade. Last week he had Edison's latest invention, the Kinetoscope.

A new drug store will be opened soon on Depot Square in Manchester, Conn. The store was formerly owned by C. D. Strickland, who conducted a grocery business.

Joseph P. Goulden, formerly of Cheney & Goulden's drug store of South Manchester, was elected as representative from Stamford on the Republican ticket, Nov. 6.

Mr. and Mrs. McGuire of Waterbury, are home from their wedding tour, and have begun housekeeping at 995 Bank street. May they be successful and happy!

Willis L. Mix, the New Haven druggist, has purchased a desirable lot in his own city, on the north side of George street, near Dwight, and will build a residence there.

The sanitarium of the Bellinger German Remedy Co., is located at Madison, in the house formerly occupied by A. C. Wilcox. The sanitarium was formerly located in Derby.

William I. Nichols, who has been clerk at Schoonmaker's drug store, Ansonia, for several years past, has resigned his position, and taken charge of S. W. Smith's new drug store in Bassett's block, in the same city. Mr. Nichols took a short vacation after severing his connection with Schoonmaker.

The grip has made its appearance up around Middletown, and the physicians report throughout the State a number of cases. The druggists feel the effects of a disease like the grip almost as soon as it breaks out by the increased business in prescriptions, cold medicines, etc.

Chas. Kieth, a drug clerk of Meriden, was walking about the streets in that city on Nov. 4, with a huge chrysanthemum adorning the lapel of his overcoat. Two young fellows passed him, and as they did so, one of them, John Bogan, said: "Here comes the dude; give him room." Kieth became indignant and thereupon caused his arrest, and in the morning at the police court Judge Platt fined Bogan \$20.00 and costs.

J. P. Fitzpatrick has applied for a druggist's license at 21 Prospect street, in Bristol, and it is understood that Fogerty & Bergnest of New Britain, are trying to make arrangements to lease the store in Skelly's block, where they expect to open a drug store. There are six drug stores in Bristol which have been located there for years, and the question arises: Does a town of good inhabitants needs two new drug (?) stores during a no-license year?

The window of Lavin's drug store on South street, Danbury, has the appearance of having been shattered by a stone. It is only a delusion however, as the glass is not broken. By a clever arrangement of strips of glass, fastened into the inside of the window in cabinet fashion, the big sheet of plate glass appears shattered. It is a great ad for Lavin, as it is the talk of the city, and people from all over Danbury come to see the delusion.

Harlow Chapin, who was formerly in the drug business in New Haven, died

at Monson, Mass., Sunday morning, Nov. 4. Mr. Chapin was a veteran of the Eighth C. V., and one of the nine members of his company who survived the battle of Antietam on September 17, 1862. He was afterward appointed hospital steward at Knight hospital on Whalley avenue, New Haven. He then set up a drug store in the City of Elms. He afterward went to Worcester, Springfield and Monson, Mass., where he died.

Levi E. Southworth, who is a bright representative of the young energetic business men of Southington, was born in Ravenna, Ohio, in 1857, and came to Southington in '77, taking a position as clerk with Pratt Bros., the druggists. In January, 1885, he purchased of this company their entire interest in the drug business, which he has permanently established and continued with marked business ability and success. He is secretary and general manager of the S. & P. Tramway Co., is a member of the Baptist Church, and holds various offices of trust in several societies and has been a life-long Republican.

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PENNSYLVANIA.

PHILADELPHIA, November 18.—The Committee on alcohol legislation, of which George M. Behringer is chairman, appointed at the recent meeting of pharmacists at the college has drafted a circular letter on the subject of tax-free alcohol, which, after being approved by members of the college will be mailed to druggists in the retail trade all over the country, soliciting replies and starting a national movement. The letter is presented elsewhere.

DIPHTHERIA ANTITOXIN.

Local pathologists are discussing the recent discoveries relative to the cure or prevention of diphtheria. Dr. John Guiteras recently presided over a conference of eight physicians who have made that disease a special study. The proceedings, for the present, will be kept secret. It is reported that experiments similar to those made by Professor Behring and Dr. Hans Aronson will be performed. The antitoxin treatment, consisting of the inoculation of the patient with blood serum, will be tried.

The old problem, "when rogues fall out, then honest men get their due," is not fulfilled in regard to the price of caffeine. For some time past this drug has been growing scarcer and scarcer until now it is hardly obtainable at almost any cost. The bulk of it is manufactured in Europe, owing to the manufacturers over there being able to secure the ingredients which constitute it far cheaper than can be obtained in the United States. Caffeine is made from damaged tea, or the cheaper grade which is generally termed tea-dust. The large tea warehouses of Europe offer a good field for this article, and the manufacturers of caffeine have been enabled to secure the tea leaves for almost a song. In this country it is different, owing to the tea warehouses being few as compared with Europe, and it is to the utter impossibility of securing the ingredients at anywhere near the same figure as the manufacturers of Europe can get their supply which has deterred our manufacturers from making caffeine.

EUROPEAN MONOPOLY IN CAFFEINE.

Although the European manufacturers have had a monopoly in the manufacture of this drug, owing to the cheap rate for which they could purchase the tea leaves,

there is a probability that more of the drug will be manufactured in this country than ever before. The owners of the big tea warehouses on the other side of the ocean have awakened to the fact that the damaged tea leaves that they dispose of to the caffeine manufacturers for almost a song has a higher value than what they thought it had. When this knowledge became universal there was a protest against the selling of tea leaves at such a low figure. The manufacturers of caffeine refused to pay more than they have been paying, thinking that the warehouse merchants would soon come around to their way of thinking. This, however, has not proven to be the case, and the consequence is that the supply of caffeine has been exhausted, as the manufacturers are not buying any tea leaves because the holders will not part with the article at the old figures. A considerable advance in the price has been made, although it is almost impossible to buy the drug.

AN EXCURSION TO NEW BRUNSWICK.

On Monday, Nov. 12, a jolly party of druggists left this city to inspect the plant of Johnson & Johnson, at New Brunswick. They were in charge of the firm's representative here, Mr. D. E. Bransome, who saw that they were well taken care of. The following names show the gentlemen who participated in the trip: James Buckman, W. N. Stem, A. T. Pollard, A. Eberly, A. C. Schofield, H. Jones, Dr. E. C. Warg, C. F. Shoemaker, C. G. A. Loder, H. C. Blair, L. C. Funk, J. P. Frey, J. B. Moore, F. R. Rohman, F. Moore, S. Gerhard, W. Gerhard, J. T. White, R. P. Marshall, Charles Leedom, F. Eberly, Walter Smith, J. L. Curry, W. L. Cliffe, Joseph Crawford, A. Lamb, W. H. Poley, W. F. Bell, F. W. E. Stedem, Dr. A. R. Frick, H. F. Voshage, W. Procter, E. R. Gatchell, Dr. A. Nebiker, Charles G. Neeley, G. Pile, G. G. Wood, M. S. Apple, A. Wilson, A. Hoch, A. R. Elfreth, E. de Reeve, Dr. W. S. F. Field, D. H. Ross, W. H. Gano, J. R. Smyser, besides C. P. Britten, M. Tidd and T. A. Brown from Trenton.

JOHN D. PARK & SONS STILL ON THE CUT-OFF LIST.

The following circular has been sent by M. N. Kline, chairman of the committee on proprietary goods of the National Wholesale Drug Association to the manufacturers and proprietors:

The circular sent out by this committee, under date of October 1, 1894, gives a recapitulation of the names of all the parties who are reported as shipping goods to Park. I am informed that John D. Park & Sons Co. have taken advantage of the absence of their name from this circular, and are ordering goods and attempting to convey the idea that they have been reinstated. Of course, if they had been, there would have been no occasion to issue the circular of October 31st at all, excepting so far as the name of Adrian Paradis (Brooklyn, N. Y.) is concerned; and the object of this circular, therefore, is to inform you that there is no change whatever in the status of John D. Park & Sons Company, Cincinnati, O.

AN ENTERPRISING DRUGGIST.

J. C. Altick & Co., the well-known druggists of Shippensburg, Pa., had a beautiful display at the recent Industrial and Trades Display in that town. The Shippensburg Chronicle refers to it as one of the most beautiful and unique in the whole process. It was, of course, in the usual float form. The colors used were pink and Nile green, tastefully combined, and three huge stacks of their specialties, "horse and cattle powder," "chicken powder," and "butter color," gave some idea of their trade in these

lines. The unique and laughable features of the float were the "sponge man" and "chamois woman," the former a cleverly constructed figure, made entirely of sponges, the head surmounted by a high hat. The "chamois woman" was a female figure clothed entirely in chamois skins, the hat being formed of dark red skins. The face and head, even to the "Psyche knot" were made of fine sponges. Both the figures were laughably natural.

QUAKER CITY NEWS

William Reilly has bought out the store at Second and Wharton streets. He has had it newly fitted up and has made a very attractive place.

David H. Ross, who was at one time a salesman for Bullock & Crenshaw, has a fine store at 2567 East Morris street. He has a good business and is very popular.

Mr. Steinmetz, the popular Girard avenue druggist, is quite an athlete. He is now in training for a limited number of rounds with George Smyth, the all-round sport of John M. Maris & Co.

A number of Camden druggists are having their stores re-fitted, re-painted and renovated. Some are adding bulk windows of a circular form, which gives a very attractive front to the store.

George M. Smyth, the well-known representative of John M. Maris & Co., has just returned from a successful trip to the West. He is full of new jokes, but has not recovered from the election.

Schandein & Lind, manufacturers of Garwood perfumes, have been working their force day and night during the last four weeks to get out their holiday goods. They have a big demand for Gardenia and Sweet-scented Shrub.

Many of the druggists in this city who have not paid much attention to hot drinks are having the necessary apparatus placed in their stores so that they can dispense something warm as well as cold. You pay your money and take your choice.

Rush P. Marshall, the well-known and popular druggist of Sixteenth and Race streets, is always ready to enter into any scheme which will benefit the drug trade and drug profession. He is an expert bicyclist, as also a lover of all athletic sports. Some time ago he met with an accident in trying to get off his silent steed to soon, but he is all right now.

The head clerk of one of our leading stores was recently rung up at 4 o'clock in the morning by a customer who bought a 2-cent stamp, had the clerk put it on the letter and then requested him to step across the street and mail it for him. The clerk had been to a party the night before or he probably would have done all the customer asked, but as it was he said he could not leave the store alone that long.

A firm of cutters styling themselves the American Medical Company have commenced operations in Wilkes Barre, Pa. It is reported that they are a branch of a cut-rate store of Allentown and are furnished with stock through Ashenbach & Miller, of Philadelphia. The druggists of Wilkes Barre have anticipated the cutters by making an all-round reduction in the prices of patents, and it is said that the move has seriously interfered with the plans of the new firm. Heretofore Wilkes Barre has been comparatively free from cutting, and it will require active measures to prevent a spread of the evil.

John M. Maris & Co., will remove their

business from Market street, west of Seventh, to 312 Market street, and 10 and 12 Hudson street. This change is made necessary owing to their increased business, their present building being inadequate to meet their wants. As it is now they occupy three buildings, the one on Market street, one on Gilbert, in rear of the Market street store and another on Seventh street. The new places of business will be large enough to allow all the different branches to be housed in them. This will practically bring all the various departments under one roof and under one management, as the buildings are to be connected.

Robert J. Campbell, who is visiting various manufacturers, soliciting their Mexican agency is evidently a fraud. His practice is to arrange a contract with the proposed victim and then ask an advance for advertising purposes of \$25 to \$100, which he usually obtains. Last April he made a contract with the Fox Machine Co., Grand Rapids, Mich., on the strength of references furnished but which they did not take time to investigate. He struck them for only \$25, but they would have advanced twice that amount as readily, being anxious for trade in that territory. Mr. Campbell has now turned up in this city and recently called upon the Bosshardt & Wilson Co., but Mr. W. H. Brill, manager for that company, took the precaution to write the Grand Rapids people, who at once telegraphed "Campbell is a swindler."

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Johnson & Johnson's Laboratories.

A party of some sixty Philadelphia pharmacists were the guests of Johnson & Johnson, at their laboratories at New Brunswick on Monday, November 12. The party were personally conducted from the City of Brotherly Love by D. E. Bransome, who represents the firm in that city. Arriving at 10.30 they were met at the railway station by the members of the firm, who showed the way to the extensive laboratories nearby on the bank of the river.

Under the guidance of Messrs. R. W. and J. W. Johnson, F. B. Kilmer and General Superintendent Rider the party were shown over all the buildings located at this point. A separate and extensive plant for the production of oiled goods and for conducting those processes in which the use of very inflammable solvents is required is located some miles distant from the main factory as a safeguard against fire.

The guests were shown every step in the preparation of perforated plasters, from the first shanking of the crude rubber up to the final punching and covering of the finished plaster, each step being explained by members of the firm or of the staff.

In the same way the forty different processes through which the raw cotton passes before it is converted into the finished antiseptic dressing were viewed in detail. One of the most interesting departments shown was that in which antiseptic gauzes, bandages, etc., are put up into packages. In this room the greatest care is taken to secure perfect antisepsis. The operatives wear special uniforms, which are washed in a solution of mercuric chloride, while they are also required to wash their hands in a similar solution. The glass topped tables, floors, walls, etc., are also treated in the same manner, thus assuring the most perfect antiseptic conditions.

Another very interesting feature illustrating the precautions taken to insure the best results was shown in the careful manner in which fish sounds are sterilized before they are manufactured into isinglass plasters. By the treatment to which they are

subjected, the fish sounds are rendered completely aseptic before they are turned into isinglass, from which the court plaster is manufactured.

Another department which attracted much attention was that devoted to the manufacture of chest protectors, chamols vests, etc., which is a new departure with this firm, but one which promises to grow to very large proportions.

The tour of inspection terminated in the topmost room of one of the buildings, where Mr. Kilmer gave an informal talk illustrated by lantern slides. Many of the slides dealt with the production of drugs in the West Indies, and showed in a most interesting and instructive manner the very primitive methods still employed in the gathering and drying of drugs in those portions of the West Indies traveled over by the speaker during last winter.

Experiments demonstrating the digestive power of papoid were also carried out and projected by the lantern.

Leaving the laboratory the excessive orderliness and neatness of which throughout aroused the enthusiastic commendation of all, the party were conducted to the Mansion House near by and there regaled with a tastefully arranged and excellently served dinner.

As the meal was drawing to its close L. C. Funk, of Philadelphia, rose and proposed "the health of our hosts" and extended them the thanks of the visitors for the courtesies shown.

MR. JOHNSON RESPONDS.

Robert Wood Johnson, who presided, responded to the toast in a feeling manner, assuring the visitors that he felt that the obligation was rather on his part, since he fully realized the sacrifices which all must have made to enable them to be present. He hoped, however, that every one would find that the little journey had repaid him in some sort, and he believed that such outings together would be of material benefit to pharmacists, even if for no other reason than that it brought them together.

The interests of all druggists were identical, said Mr. Johnson, whether retailers, manufacturers or jobbers. How intimately they were interwoven seemed not to be generally understood and some even talked of doing away with the jobber. It would not do, said the speaker, to lose sight of the important part that the jobber plays in commerce. The jobber carries the stock which enables the retailer to conduct his business on very small capital. The average capital invested by the two hundred jobbers of the country he estimated at \$100,000 each. If the jobber were done away with all this stock would have to be carried by the retailer, thus making it necessary for the retailers to carry in addition to their present stocks the \$20,000,000 now carried by the jobbing druggists, and instead of being able to conduct a business on a capital of \$2,500 or \$3,000 would have to carry a stock of from \$10,000 to \$12,000 each.

It might be feasible to supplant the jobbers in the city, where supplies could be more readily distributed, but for the remote sections this would be almost or quite impossible. The speaker concluded by saying the integrity of the present system must be maintained, since experience had thoroughly demonstrated its utility. As to the welcome extended the visitors, he would have to ask his honor Mayor Jas. H. Van Cleef to speak for him on that score.

Mayor Van Cleef then made a bright, sparkling and witty speech of welcome in which the advantages of the city of New Brunswick were eloquently set forth, and he concluded by inviting his hearers to

come to this earthly paradise, for "we have a few corner lots left yet."

Caswell A. Mayo of the American Druggist and Pharmaceutical Record arose at the request of Mr. Johnson and made a few remarks on the important place which chemistry is taking among the manufacturing interests of the country.

Messrs. H. C. Blair, A. R. Fink, C. F. Shoemaker, F. W. E. Stedem, W. Nelson Stem, and J. B. Moore of Philadelphia were then called on in turn, each making a few remarks and expressing appreciation of the hospitality shown and of the value of the lesson learned from a visit to the laboratories.

MR. KILMER GIVES STATISTICS.

Mr. Kilmer being called upon, said that during the course of his tour through the laboratories a number of questions had been asked which had been more or less correctly answered individually. He had made a note of some of these questions and would give some figures which might prove of general interest. The total floor space, in square feet, occupied by the laboratories is 125,000; the plaster capacity counted as porous plasters (5 x 7 1/4) is 18,000 to 15,000 a day, or nearly 5,000,000 a year, representing a length in square yards of 200,000; the cotton capacity of the factories is equal to 3,000 to 4,000 pounds daily, 1,500,000 pounds per year. The yield of cotton is 300 pounds to the acre; 15 to 20 acres a day, or 7,000 acres a year, are thus required to supply the factory. The gauze capacity of the factory is 10,000 yards a day, 3,500,000 yards a year; the entire consumption of gauze, lint, bandages, etc., amounts to between 8,000,000 and 4,000,000 pounds per year.

THE DRUGGIST A SAFEGUARD TO THE PUBLIC.

Leaving this subject Mr. Kilmer said that he wished to say a word commending the action taken by the American Pharmaceutical Association in declaring its opposition to the supply of physicians with drugs direct. The retail druggist, said he, is a safeguard against the introduction of inferior goods. Physicians as a class lack the practical experience and the special training necessary to distinguish the good from the bad and as soon as the restraining influence of the educated pharmacist is removed, unscrupulous manufacturers will not hesitate to palm off inferior products on the physicians, who will not find it out save through their failure to give satisfactory results.

Wallace Procter, of Philadelphia, being called on said that the most appropriate thing that he could say was the moving of a vote of thanks, which he forthwith did, putting the vote, which being carried unanimously, the guests left with much hand-shaking and with appreciative words for the hospitality of Messrs. Johnson & Johnson.

Among those present were G. Y. Ward, D. H. Ross, H. C. Blair, W. N. Stem, A. Eberly, F. Eberly, H. Jones, C. A. Schofield, F. R. Rohman, C. Leedom, W. Cliffe, J. Crawford, J. T. White, C. G. A. Loder, J. L. Curry, F. W. E. Stedem, A. R. Elfreth, W. H. Poley, J. Buckman, J. P. Frey, J. B. Moore, Wallace Procter, E. De Reeve, A. T. Pollard, M. S. Apple, C. Lentz, F. W. Bell, N. D. Streeter, C. G. Nealy, W. H. Pile, J. N. Long, T. A. Brown, M. Tidd, A. Nebecker, H. B. Morse, F. Morse, A. T. Conard, E. R. Gatchell, S. Gerhard, W. Gerhard, Jr., Dr. A. R. Fink, A. Lumb, W. Smith, C. F. Shoemaker, A. Hoch, A. R. Voshage, Dr. Field, L. C. Funk and D. E. Bransome of Philadelphia, Hon. Jas. H. Van Cleef, of New Brunswick, and Caswell A. Mayo, of New York.

The Alcohol Circular of the Philadelphia Druggists.

DEAR SIR:—At a meeting of pharmacists held at the Philadelphia College of Pharmacy on Tuesday, October 16, 1894, the section of the tariff bill enacted on August 28 last, relating to the repayment of tax on alcohol used for manufacturing purposes was discussed.

This section reads as follows:

SECTION 51.—Any manufacturer finding it necessary to use alcohol in the arts, or in any medicinal or other like compound, may use the same under regulations to be prescribed by the Secretary of the Treasury, and on satisfying the collector of internal revenue for the district wherein he resides or carries on business that he has complied with such regulations and has used such alcohol therein, and exhibiting and delivering up the stamps which show that a tax has been paid thereon, shall be entitled to receive from the treasury of the United States a rebate or repayment of the tax so paid.

Resolutions were unanimously adopted asserting the desirability of having enforced the law relating to rebate of tax on alcohol used in making medicinal preparations. The members of the Philadelphia College of Pharmacy placed themselves on record as favoring tax free alcohol for manufacturing purposes, and urged pharmacists to work in the interest of having the law retained and enforced, instead of being repealed.

At that meeting the undersigned were appointed a committee to place the question of tax-free alcohol before the retail pharmacists of the country, and to endeavor to have their views upon this matter of vital interest to their business properly presented to Congress and the executive officers of the Government.

RETAIL PHARMACISTS NOT REPRESENTED.

It was stated that the wholesaler, the manufacturing pharmacist and the patent medicine manufacturer had each presented their views, but that retail pharmacists had not expressed their opinions, although, in point of numbers and legitimate use of alcohol in preparing medicinal preparations, they were more concerned than any other class of manufacturers.

THE CONSUMPTION OF ALCOHOL.

The present tax on alcohol \$1.10 a proof gallon amounts to \$2.09 on every gallon of 95 per cent. alcohol, and this represents in many medicinal preparations the largest item of cost. According to our best information, there are about 40,000 druggists in the United States. A very conservative estimate, it is believed, of the amount of alcohol used by each one annually in preparing medicines, would be two barrels of forty gallons each.

Such an allowance would indicate that the government will collect as a tax from this source during the present year \$6,688,000. The cost of our preparations are thus artificially increased to this extent, necessitating the employment of a large amount of capital from which no profit is derived.

During the year 1893, alcohol was supplied to the retail drug trade in Philadelphia at an average price of \$2.18, of which amount but thirty-nine cents represented the cost of the alcohol, and \$1.79 the tax on each gallon. This will give some idea of the degree to which medicinal preparations have been unjustly enhanced in value by the retention of the high tax on alcohol, and from this we ask relief.

ALCOHOL IRREPLACABLE.

We have no solvent that will take the place of alcohol in the extraction of most drugs; and in the preparations into which it enters, it becomes as much a part of the medicine as the contained drugs or chemicals. To no other cause so much as to the high tax on alcohol, extending over a period of more than thirty years, can be attributed

the fact that the retail pharmacist has been largely diverted from the true character of his business.

The difficulty of recovering alcohol used in the manufacture of preparations on the small scale, has rendered this part of his calling no longer profitable, as he could not compete with the large manufacturer with facilities for working on an extensive scale. As a consequence, the manufacturer has flourished, and deprived the retailer of a large portion of his legitimate occupation.

THE PUBLIC BENEFITED.

With tax-free alcohol at thirty-five to fifty cents a gallon, every pharmacist could economically and correctly prepare his own medicinal preparations and would be responsible for their purity; and thus the public would be protected from fraud. Tax-free alcohol would undoubtedly greatly improve and extend our knowledge of pharmacy.

It is the retail druggist who directly supplies the needs of the public and through him it will derive such benefit as will result from the enforcement of this act. Some manufacturers have urged upon the Secretary of the Treasury such a restrictive application of the law as would exclude the retail druggist from its benefits. This, the very class through whom the benefits will be disseminated, and whose claim from a moral and economical standpoint should be the strongest, must now assert themselves, lest they be ignored and excluded from sharing in the advantages of the act.

REASONS FOR NON-ENFORCEMENT.

While the law has been enacted, this particular section requires that regulations are to be prescribed by the Secretary of the Treasury, and as such regulations have not been framed, it remains inoperative. The reasons assigned for the non-enforcement of this section of the act are:

(1) The loss of revenue that would legitimately occur if the section is enforced. The amount of tax collected by the Government from this source, as shown above, is large; but surely, this argument entirely loses its force, if we but stop to think who ultimately pays this tribute-money—the sick, the infirm, the wounded, the dying. Can we admit for one moment that the most enlightened nation of the nineteenth century finds it necessary to place a penalty upon her unfortunate sick? Surely such a barbarity cannot be defended and continued by an American Congress.

(2) The difficulty of framing regulations that would permit those entitled to receive the rebate provided for by the act, and at the same time amply protect the Government from imposition and fraud. This has been magnified into an insurmountable mountain. The Government has here a task, we believe, no more difficult than that of preventing illicit distilling, illegal brewing or manufacture of tobacco, with all of which it has successfully dealt. This committee is not willing to admit that the great body of American pharmacists are not honest and ready to uphold any just regulations that may be imposed by the treasury department in the enforcement of this act. Pharmacists do not desire a rebate of the tax on alcohol entering consumption as cordials, bitters and beverages, nor on spirituous, distilled or malted liquors sold as such, but only on such alcohol as is legitimately used in the manufacture of medicinal preparations.

While hardly within the province of this committee to outline regulations for the secretary of the treasury, we have reason to believe that any practical suggestions would be welcome. The committee is of the opinion that regulations can be adopted as safeguards against the improper usage

of alcohol on which tax is rebated, and has in mind already an outline of what those regulations should be, and would request suggestions from others on this subject.

(3) The neglect of Congress to make the necessary appropriation for carrying this section of the law into effect. This objection is not a permanent one, and can be easily remedied at the next session of that body. The cost of enforcing this section of the law will depend largely upon the regulations prescribed, but we have no reason to believe that it will be unduly large.

The committee would urge upon every druggist the necessity of exerting his influence in the direction of having this law enforced. We ask you to personally present this subject in all its bearings on pharmacy to the attention of your Congressional Representatives. The Committee requests the attention of pharmaceutical journals and pharmaceutical associations to this, the most important question affecting pharmacists that has arisen in years. We solicit your earnest co-operation. Get every pharmacist thoroughly aroused to its importance, and urge upon him the necessity of concerted action toward securing the necessary legislation to make the law operative.

The Committee requests that every druggist promptly send answers to the following: (Address your replies to the "Committee on Alcohol Legislation," Philadelphia College of Pharmacy, 145 North Tenth street, Philadelphia, Pa.)

- (1) What classes of pharmaceutical preparations do you now prepare?
- (2) With tax-free alcohol what others would you prepare?
- (3) How much alcohol do you estimate that you have used in the manufacture of pharmaceutical preparations only during the year 1893?
- (4) What suggestions do you offer as to the character of the regulations that should be prescribed by the Treasury Department to prevent fraud?

George M. Beringer,
Chairman.
William McIntyre,
Robert England,
Rush P. Marshall,
Joseph W. England,
Secretary.

PHILADELPHIA, Pa.

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MARYLAND.

BALTIMORE, Nov. 28th.—Wm. Silver Thompson, one of the most respected pharmacists that Baltimore has ever known, died at his home in Waverly, Baltimore, Md., on the 31st of October, after a lingering illness, at the age of 72 years. Mr. Thompson was born at Christiansa, on Nov. 7th, 1822. He leaves a widow, a daughter and two sons, one of whom, George Andrews Thompson, will continue the business established by Geo. Andrews in 1829 and which is well known to every citizen of Baltimore under the firm name of Andrews & Thompson. Mr. Thompson was apprenticed to Mr. Andrews in 1838 at the age of 16 years to learn the business of pharmacy, remaining with him six years and six months. Mr. Andrews was a most competent teacher and one of the most active in the organization of the Maryland College of Pharmacy in 1841. The thorough methods of Mr. Andrews resulted in sending forth some of the most reputable pharmacists of this city, of which Mr. Thompson stood preeminent. Mr. Thompson was one of the first to matriculate as a student at

the Maryland College of Pharmacy, from which institution he was graduated in 1842, a member of the first graduating class of the college. When Mr. Thompson left Mr. Andrews it was to open a pharmacy on his own account at the corner of Fayette and Howard streets. But his preceptor made him an offer that induced him to discontinue business at this stand and to again enter his employ. The copartnership of Andrews & Thompson was established in 1855, and never was there conducted a better regulated pharmacy in this city, enjoying alike the confidence of the medical profession and the community at large. In those days the people were influenced by confidence on the moral basis of correct dealing and would go or send long distances to indulge their preferences. Mr. Andrews retired from active business in 1872, since which time Mr. Thompson and his sons have maintained the reputation of the venerable firm, and their store is now located on Eutaw street, near Madison avenue, and as stated above will be there continued under the old firm name of Andrews & Thompson. Mr. Thompson was active in the reorganization of the College of Pharmacy in 1856, and was its first secretary, continuing in active service until declining health would no longer permit. He was so honored by the members that he was elected president in his absence, but he resigned a short time after as a conscientious duty, not feeling that his advanced age and feeble health would permit a proper performance of his duty. He was from early life until his death active as a member of the Maryland College of Pharmacy, Maryland Academy of Science, The Maryland Institute for the Promotion of the Mechanical Arts, The Maryland Historical Society, The American Pharmaceutical Association, and for twenty-five years a vestryman of Saint John's P. E. Church at Waverly. He edited the journal of Transactions of the Maryland College of Pharmacy, organized soon after the reorganization of the college and was a contributor of many valuable essays on pharmacy. As a citizen, business man, husband, father and friend he was true, and will be remembered with affection and veneration by all who knew him.

MARYLAND NEWS NOTES.

The Clifton Pharmacy has been removed from the corner of Gay and Chase street, to the corner of Biddle and Ann streets.

G. T. Stricker, pharmacist at the corner of Bank and Eden street, died at his home on Saturday evening, November 17th, aged 42 years.

Robert F. Burton has sold his pharmacy 1401 North Charles street, to Ed. O. Street; W. H. Leffer bought from E. O. Street his pharmacy at the corner Bond and Monument streets.

W. L. Marsh, late assistant with N. C. Mules, at the corner of Baltimore and Calhoun streets, has taken charge of the pharmacy No. 904 Madison avenue, R. A. Dawson, proprietor.

Lino J. Jiminez has sold his pharmacy, 1287 East Eager, to Mr. Jos. Moore, class of '89, who has recently been attached to the North-Eastern Dispensary as pharmacist. Mr. Jiminez will retire from the drug business.

Mrs. Amelia Eigenbrot, aged 75 years, was taken suddenly ill in car No. 324, Hall Spring electric car, on the morning of November 16th, and was carried into Dr. Wm. Cherry's store at the corner of Aisquith and Orleans streets, where she died. She was removed to 2001 East Fayette street, and Coroner Billinslea notified.

Gilpen, Langdon & Co. were again

visited by fire on the morning of the 16th of November. The flame was first noticed by Officer Reynolds in the rear of their chemical laboratory, No. 24 Light street, at 12:10 A. M., and he immediately turned in an alarm. The fire department responded promptly and streams were soon turned on the blaze and it was soon under control. This place was burned out a few weeks ago.

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SOUTH CAROLINA.

CHARLESTON Nov. 18.—The old and well-known business of the late D. Vogt, on King street, in Charleston, has been purchased by D. P. Frierson & Co. These gentlemen are young men of business ability and their personal popularity and energy together with the thorough and extended experience of Mr. Frierson will, we feel sure, make their business one which will reflect credit upon themselves and their community.

Fred. L. Jacobs, representing Messrs. Wyeth & Bro., of Philadelphia, was in this city recently.

J. H. Hawkins, of Charleston, has returned from New York, after undergoing a painful operation on both eyes.

Mr. Weeks, till recently of Columbia, is now employed with H. W. Hummel. His many friends are glad to have him in the city again.

The druggists of the State, members of the South Carolina Pharmaceutical Association, are looking forward with much interest to the approaching annual meeting, which takes place on the 22d inst. This week (from 19th to 24th) is Charleston's "gala week," and with the red, white, and blue decorations, lanterns, and other attractions, as excursion rates over all roads, business opportunities, etc., we hope to have an unusually well attended and, no doubt, interesting meeting.

The Evans dispensary law causes the druggists over the State some extra trouble and unnecessary annoyance in purchasing their alcohol, etc., but they are gradually learning "what can't be helped must be borne," and are making the best of a law which, if made especially to hold down and annoy any legitimate trade or profession, seems to have settled on the South Carolina druggist, and force him to work harder to make up for extra cost and trouble in the purchase of his alcohol.

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OHIO.

CINCINNATI, O., November 20.—One of the most interesting cases ever tried in this city was the suit to determine the purity of Paskola, or rather to discover if it possessed digestive properties. It was a battle royal in a legal sense as is evidenced by the fact that it required a week to try the suit. Messrs. Outcalt, Granger & Hunt, one of the leading law firms of the city, was retained by the Predigested Food Company to represent the defense. Messrs. Dye & Dye appeared for the prosecution. About five weeks ago Assistant Food and Dairy Commissioner Luebbling, of this city, walked into the Fourth street drug store of Wilmot J. Hall, a leading pharmacist, and purchased a bottle of Paskola. It is a remedy for making lean people fat and is extensively advertised all over the country. The circulars say that Paskola is a pre-digested food, and that it will produce flesh. The contents of the bottle purchased from Milton Franken at Hall's drug store was analyzed by Professor Charles T. P. Fennel, the official chemist of the Food and Dairy Commission here. The analysis was completed

and the chemist stated that he found no digestive ferments in the preparation. A warrant was accordingly issued for the arrest of Franken.

THE DEMURRER IN THE PASKOLA CASE.

The attorneys for the defense filed a demurrer in Squire Winkler's Court and the justice sustained the demurrer. Several weeks were thus spent in parleying and the case was finally brought to trial before Squire Tyrrell. A jury of twelve representative business men had been impaneled and the case was begun on the 5th inst. Arranged on the side of the defense were several of the best chemists of the city. They were: Dr. Dickore, who has a good reputation; Professor Schmidt, of the Health Department, and Messrs. Morgan and Hoffman, and John B. Russell, of the Predigested Food Company, of New York. On the side of the State were Professors Fennel and Simonson, both of whom are identified with the Cincinnati College of Pharmacy. It was evident from the start that the trial was to be an exhaustive one. The court room bore all the semblance of a chemical laboratory. There was apparatus of every conceivable kind on every hand, and the chemists were there to complete the scene.

EXPERTS IN PHYSIOLOGY.

Subpoened to testify for the State were Doctors Whitaker, Forchheimer, Eichberg, Kramer, Culbertson and others. These eminent disciples of Esculapius were summoned to testify as physiological experts. They enlightened the jury and spectators as to the constituents of the gastric juice, and told points about digestion that were equally interesting. Each was shown the analysis of Paskola and asked what effect the compound would have upon the stomach. Each testified that Paskola, as represented to them, would not sustain life without the addition of other food. Professor Fennel occupied the witness stand for almost a day, and his testimony was very interesting. He stated that he found no digestive ferments in the bottle of Paskola submitted to him for analysis. He said he found that the mixture was principally commercial glucose, to which sulphurous and hydrochloric acids had been added. He also mentioned some other chemical elements which he found. As a whole the analysis of Paskola as made by Professor Fennel was very nearly identical to that made by Dr. Eccles, of Brooklyn, as a member of the committee on adulteration of the New York State Pharmaceutical Association, and which was printed in the issue of the American Druggist and Pharmaceutical Record for July 10. Professor Simonson, the other chemist for the State, said upon the stand that he had found the same results as his colleague, Professor Fennel, in the latter's laboratory, but that he afterward found digestive ferments in Paskola in his own laboratory. This was considered a hard blow to the State. The test made by Professor Simonson, however, was made at a different temperature from that made by Professor Fennel.

DEFINITION OF PREDIGESTED FOOD

When asked what a predigested food was Dr. Whittaker, a professor in the Medical College of Ohio, said he could conceive of only one such substance which he said would be blood. Dr. Forchheimer made practically the same statement. The testimony of Drs. Eichberg and Kramer was principally on points of physiology.

THE DEFENCE.

All the chemists for the defence testified that they found digestive ferments, nitrogen, and other elements of a wholesome nature. Dr. Schaller, of the University,

also testified as to the physiological effects of Paskola. He said he thought it would aid digestion if given with other food and said it would also sustain life. He also said it was a flesh producer. The chemists for the defense all testified in the same strain, notwithstanding that they were not allowed to hear each other. Dr. Dickore, who was a colleague of the late Professor E. S. Wayne, stated that he had found digestive ferments and nitrogen in Paskola. He detailed his experiments step by step and his testimony was considered very "clean cut." The witness also explained the mode of preparation of glucose, and said that it was made principally in Illinois and New York. "Glucose can be made from any plant or vegetable that contains starch," said Dr. Dickore. "It was formerly made from potatoes, but in later years has been manufactured principally from corn. It is boiled in vacuum tubes on account of the likelihood of the formation of caramel, or burnt sugar, as it is better known. Occasionally sulphurous acid is passed through the unfinished product to clarify it. The more clear the color of the product the more it brings in the market."

Dr. Dickore also testified that Paskola contained 2 10ths of one per cent. of hydrochloric acid, which is about the same proportion of this acid as is found in the gastric juice of the stomach. The attorneys for the State gained little by an exhaustive cross examination of this witness. The testimony of Chemists Hoffman, Schmidt and Morgan was on a line with that of Dr. Dickore.

MR. RUSSELL FOR THE DEFENSE.

Decidedly the best witness for the defense was John B. Russell of the Predigested Food Company, which makes Paskola. He said he was the originator of the formula for making Paskola and that he got the idea last summer while traveling in Europe. In the course of his testimony Mr. Russell said that while he was in Munich he met and talked with Pettinkoff and another noted chemist, and he told them that he had used digestive ferments obtained from the pineapple. He said the German chemists, experts as they are, were surprised to hear the above statement. He further stated that he explained what he intended to make Paskola do and that his idea met with the approbation of the foreign chemists. Mr. Russell said that the best glucose that could be obtained was used in the manufacture of Paskola. He refused, however, to give the formula for making the preparation and was sustained by the Court. Mr. Russell was formerly in the employ of Parke, Davis and Co. of Detroit. He is a graduate of the New York College of Pharmacy. He was the closing witness for the defense.

ILLUSTRATIVE TESTS.

A number of tests were next made to discover the digestive powers of Paskola. Boiled meat and the albumen obtained from eggs were used. These substances were placed in sealed jars with a portion of hydrochloric acid. The tests were made by a student of the Cincinnati University assisted by Messrs Fennel and Dickore. The Paskola partially digested the substances named above while other meat and albumen placed in jars with glucose remained unchanged. The case went to the jury after these tests and after being out for four hours a verdict of not guilty was rendered. The outcome of the case was naturally a source of much gratification to the Paskola people and a banquet at the Grand Hotel followed.

Despite the outcome of the case in question the war on Paskola is to be continued. A number of samples are now in the hands of Professor Fennel awaiting analysis. As soon as the work of Chemist Fennel is completed more arrests will follow.

Before leaving the city Mr. White is alleged to have stated that he would take all of the Paskola out of Ohio and send it to other markets and change the style of the preparation sent into this State in the future. He is also alleged to have said that he would not defend any more cases brought against druggists for selling Paskola.

"We have conformed with the Michigan law," said Mr. White to the correspondent of this journal. "The sale of our product was stopped in Detroit, but we have changed the style of our labels and we now state the amount of glucose in Paskola."

"How much glucose is in Paskola?" he was asked.

"Eighty-five per cent.," said Mr. White.

It is said that the cost of the trial detailed above was \$25,000 to the Predigested Food Company. It can thus be seen that the makers of this preparation are more than anxious to avoid further litigation. Mr. White, of the Predigested Food Company, is said to be a multi-millionaire. Not long ago he gave a \$200,000 dormitory to Yale College. He is at the head of the company which makes the Shaker preparations, which are made at Mt. Lebanon, N. Y. It is said that \$2,500,000 worth of these remedies are sold annually.

VIN MARIANI VINDICATED.

The case of the State against John Keeshan for selling Vin Marini was withdrawn in Squire Winkler's court yesterday. It will be remembered that Mr. Lichtenfeld, a representative of the Vin Mariani Co., of Paris and New York, came to this city and satisfied Prof. Fennel that the coca crop in South America was so variable that no fixed standard could be obtained for the per cent. of the alkaloid cocaine in Vin Mariani. The analysis of Vin Mariani as made by Prof. Fennel was correct in every way, however, and the withdrawal of suit does not affect his work. Consequently when the suit against Keeshan was withdrawn it was said that no further attacks would be made upon Vin Mariani. This product has been a staple article upon the drug market for the past thirty years, and druggists generally will rejoice at the outcome of the case. It is in the nature of an exoneration of the members of the craft in the eyes of the public.

THE LATEST NEWS.

Harry Sriethorst has the sympathy of his host of friends over the death of his step-father, John Egbert, which occurred last week. The deceased was a well-known citizen of the Tenth Ward.

Prof. J. U. Lloyd, Dr. Albert Springer, Wilmot J. Hall, John Francis, George Eger, Dr. William Simonson, Louis Klayer, Al Bohlmer, Julius Eichberg, M. D., Mr. Forbes of diastase fame, and others prominently identified with the drug business, were interested spectators at the Paskola trial.

Mr. C. G. Lloyd of the well-known firm of Lloyd Bros., the wholesale druggists, bought two rare botanical works the other day for his library. The books are said to be the only ones of their kind in the country, and very valuable. The purchase price was \$80, although the books were said to be worth \$150.

Charles I. Park, a son of the late John D. Park, died in this city during the past week, at the Good Samaritan Hospital. After the death of Mr. Park it was made known that he was a married man. His wife produced her marriage certificate, which was issued in Dayton, Ky., about a year ago. Mr. Park was a prominent member of the Knights of Pythias, who took charge of the remains. The funeral was held in Dayton, Ky.

Another death during the past week which cast a gloom over druggists generally was that of C. A. Nulsen, the once well known wholesale druggist. Mr. Nulsen was formerly the head of the firm of C. A. Nulsen & Co., but of late years he has been in the cigar manufacturing business on Main. He was a graduate at the St. Xavier College. The remains of the deceased were cremated at the crematory on Dymith avenue, Clifton.

The officers of the food and dairy commission have begun another crusade against grocers selling skimmed milk. Fifteen warrants were issued on Saturday last in Squire Winkler's court. While in the city the other day the State food and dairy commissioner stated that the war against adulterations in Ohio was progressing nicely and that the State is being rapidly rid of impure products. The commission now has the co-operation of all well meaning trade organizations, notably the Wholesale Grocers' Association.

IOWA.

DES MOINES, November 20th.—The department of pharmacy, Drake University, of this city, reports a prosperous term. The college now occupies a portion of the University Building at "University Place." Dr. McMichael, who last year was the lecturer and demonstrator of pharmacy, resigned, and Louis Schmidt, Ph.G., who last year was professor of chemistry, now occupies the chair of pharmacy. Prof. Ross, of the regular university staff, is the professor of chemistry, and A. P. Weber is now lecturing in Inorganic Materia Medica in place of Dr. Benson.

THE OUTLOOK.

Druggists generally throughout Iowa complain that trade is very quiet. And this added to the feeling that this year's failure of crops will make times stringent makes them as a class very conservative. Recent extended rains have, however, done much good serving to fill the ponds and streams, thus doing away with the danger of a water famine this winter, which was threatened in case it froze up before plentiful rains. While trade seems to be lighter than in former years, yet it seems to be steady and the demand healthy and dealers generally report collections up to the average of former years.

NEWS NOTES.

H. S. Sanford has opened a new drug store at Runnels.

Walton & Smith have opened a new store at Eagle grove.

F. A. Dixon & Co., Lohrville, have sold their drug store to H. P. Bell & Co.

J. D. Elwood & Co., of Coon Rapids, have sold their pharmacy to P. H. Hall.

The Sell Drug Company of Osceola has been succeeded in the drug business at that place by the Osceola Drug Co.

Willis Hufford of the firm of Hufford Bros. Pharmacist, Des Moines, has just returned from a week's visit to Iowa Falls.

A. H. Miles of Des Moines, one of Iowa's most prominent pharmacists, has just returned from an extended hunting and fishing tour. He reports good success and a pleasant time.

A. G. Spohr, who formerly owned the Opera House Pharmacy, Des Moines, but latterly has been a member of the prosperous firm of Spohr & Stewart, Mason City, has purchased his partner's interest and will continue the business as sole proprietor.

A new stock company has been formed for the purpose of starting a new whole-

sale drug house at Ottumwa. We understand that the capital is \$100,000. This will give Ottumwa two wholesale houses, as J. W. Edgarly & Co. [are also located there and are doing an extended business.

The hot soda had seems to have struck Des Moines, and several pharmacists have put in apparatus for same. This class of drinks don't seem to have been a howling success with the drug trade generally, and it remains to be seen how our druggists come out with them. Several of them have also put in a line of fancy candies.

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MICHIGAN.

Detroit, Nov. 20.—Trade conditions in Detroit are certainly brightening up and during the last two weeks merchants have indicated in a number of ways their confidence in a speedy revival in business. In the first place the newspapers are being more liberally patronized in the matter of advertisements and the business managers of the daily press are of the opinion that it is about time. The advent of cold weather accompanied by raw winds and slushy snow has had a stimulating effect. Retail dealers feel an increased demand for the staple articles. Their stocks as a general rule have been reduced to the minimum and city jobbers in all lines have found it difficult to supply the first real demand for goods. The coming of winter has brought with it the usual flood of colds and kindred affections. The increased activity of the physicians has kept the average druggist on the jump at his prescription counter. At the present time diphtheria has become almost a scourge in this city and the health authorities are at their wits ends to know what to do to wipe it out.

PATENT MEDICINE MAN IN TOWN.

A slick stranger and a sharper to boot recently struck Port Huron with apparently a brand new scheme. He called himself T. H. Johnston and claimed Detroit as his home. He called upon Druggist Edward J. Rogers and represented that he had a cure-for-all patent medicine. He informed Mr. Rogers that if he would buy \$300 worth of the stuff and place it on exhibition in his show windows, the result would be a string of customers a block long. Mr. Rogers was "on to" the scheme and told him to skip. He tried the same thing on another well known druggist, but the detectives hustled him out of town.

The new store of Dodge & Vivian at Calumet, will be one of the finest in that part of the State. They expect to open for business about December first. Ira K. Fox of Merrill, Wis., a first class pharmacist, has been engaged to take charge of the prescription end of the establishment.

THE MICHIGAN BOARD.

The State Board of Pharmacy last week held an examination at Lansing, and fifty-five aspirants for certificates were present. The following were successful: Registered Pharmacists—C. J. Anderson, Manistee; J. C. Belcher, Windsor, Ont.; Jessie M. Bruce, Evart; W. E. Cooper, Jackson; James E. Davis, Detroit; W. H. Fox, Constantine; F. A. Gleason, Greenville; W. D. Hammond, Au Sable, R. C. Henderson, Millington; I. W. Hicks, Sherman; C. O. Hubbard, Jackson; W. A. Jones, Jackson; John Kremer, Grand Rapids; T. E. Murdock, Ypsilanti; H. D. Packard, Flushing; J. DuSaar, Detroit; J. M. Sanderson,

Edmore; Lewis Stockley, Iron Mountain; R. Van Haaleten, Detroit. Assistant Pharmacists—E. J. Sleiter, Grand Rapids; J. J. Van Haaleten, Kalamazoo; and R. Van Haaleten, Kalamazoo. The next meeting for the examination of candidates will be held at Detroit, January 8, 1895.

THE CARELESS HANDLING OF DRUGS.

The recent death of a Grand Rapids young lady through a careless mistake on the part of a drug clerk in handling medicine has started the newspapers in that city in a movement to try and find some means for obviating the danger. It has also been suggested that many cases of death are due to the careless handling of drugs in private medicine collections. At Cadillac several deaths have resulted from such a cause. In one corner or on some shelf in almost every residence may be found bottles and boxes of mixtures, some of which are harmless and some of which contain the elements of death. Sometimes this drug collection is kept under lock and key, but oftener it is not, and is within the easy reach of children. Carelessness in the use of drugs is one of the most prolific sources of death, but one fact remains, and that is, that the laws in Michigan if enforced are sufficiently strong, and limit and define the duties of the drug clerk as far as it is deemed advisable. The best of pharmacists are liable to make mistakes.

MICHIGAN NEWS NOTES.

H. F. Wyatt recently purchased a stock of drugs and has opened a store at Adrian.

W. A. Hand of Flushing, has just placed a handsome new hot soda fountain in his drug store.

Horace Baker, of Tecumseh, recently celebrated his thirtieth anniversary as a druggist there.

A new plate glass window has been placed in the front of Kinsley's drug store at Menominee.

Cate & Cate, druggists at Menominee, have just put in an immense hot soda fountain in their store.

E. P. Hess has purchased the drug stock of E. W. Gallagher at Saginaw. It is located in the South End.

J. M. Beckton has started a drug store at Caro. He was formerly employed by R. G. Burell of Port Huron.

Anderson & Orth have purchased the drug stock of Mrs. Abby at Midland, and will continue the business.

O. P. Schuler of Charlotte, is having his drug store repainted and redecorated in preparation for the holiday trade.

G. Stofflet has moved his family from Three Rivers to Sturgis, where he has secured a position in a drug store.

The store formerly occupied by Lignell & Olander at Calumet, druggists, will shortly be filled by the post-office.

T. R. L. Loud, the popular traveller representing Merck & Co., of New York, recently visited the trade in Detroit.

John W. Toan of Portland, has sold his stock of drugs to John W. Higgs of Lansing, who will continue the business.

C. W. Ives of Belding has leased a building at Traverse City and will remove his stock and fixtures to that city.

W. L. Holland recently married Miss Mary McKenny of Albion. They spent their honeymoon with western friends.

Pontiac druggists have agreed to close

their stores on Sunday except between the hours of 9:30 a. m. and 5 to 6 p. m.

Walter Kephart recently moved his family from Alma to Potoskey, where he has taken a position in Harwood's drug store.

Harry Rodenbaugh, representing Rodenbaugh Brothers of Mancelona, will have charge of a new drug store just opened at Alba.

H. C. Kinnie, who conducted a drug business at Carunna, for many years, has packed up his stock and removed it to Tekonsha.

Leach, the Utica druggist, has had charge of the store of C. E. Rice while the latter is hunting deer in the northern part of the State.

A. K. Moeller of Saginaw, has asked permission of the board of public works to build an addition to his drug store which will cost \$400.

Lake Odessa will shortly have a new pharmacy. George Northrop of Freeport, has announced his intention of putting in a stock there.

Mort Miller, the Cadillac druggist, recently married Miss Callie Kelsey of Saline. The happy couple left for the East on a wedding tour.

Burglars recently attempted to burglarize Power's Pharmacy at Ontonagon. After prying up two or three windows they were frightened away.

W. D. Allen will shortly open a new drug store at Bangor. He has secured the services of C. E. Husey, who will have charge of the business.

Thomas J. Parker, the druggist at 1173 Russell street, Detroit, was arrested and fined \$15 for violating the pharmacy law by employing an unlicensed clerk.

Druggist E. A. Hamilton of White Pigeon, Mich., is redecorating and improving his store. A new plate glass window has been placed in the front.

J. M. Klein has taken charge of his father's business at Chelsea. He is a recent graduate of the Pharmacy Department of the University of Michigan.

Dr. Devoll has accepted a position in the chemical department of Parke, Davis & Company. He was formerly assistant in chemistry in the University of Michigan.

The drug store formerly owned by H. A. Sorg & Company at Marine City, has been purchased by Frank McElroy and James F. Leitsch. They have already taken possession.

Robbers recently entered the pharmacy of A. D. Stark at Burlington. They secured a gold watch and \$40 in cash. They were seen while leaving the store, but escaped in the darkness.

Clement Terpooten of Bay City, has joined the ranks of the benedicts. He is now happily settled in their new home there, with his newly made wife, formerly Miss Rose Hughes of Flint.

J. S. Hewitt, the Milford druggist was recently arrested on the charge of selling liquor illegally. He has given bonds, hired counsel and says he will contest the case for all there is in it.

George Henry Dawson is one of the few traveling men representing Parke, Davis & Company who always signs his full name on hotel registers. He was at Saginaw and vicinity last week.

The stock of the Fleugal Pharmacy at Adrian, has been purchased by W. C. Lautner of Detroit. H. W. Holcomb

purchased the same from Lautner, and the stock will be removed to Detroit.

Runnenberg & Brown of Saginaw, have fitted up a cold storage building there and will conduct a bottling works. All kinds of soft drinks and mineral waters will be manufactured and sold.

The faculty of the pharmacy school at Ann Arbor have found it necessary to pass a rule imposing a severe fine upon students who are in the habit of amusing themselves by marking their names on the desks and seats of the recitation rooms.

H. L. Wagner, of Wagner & Shepherd, druggists at Adrian, has sold his interest in the business to Gordon McCracken, traveling representative of William Morrell, wholesale druggists of Cincinnati. McCracken will take possession about January first. Mr. Wagner will remove his family to San Antonio, Texas, where he will engage in the business again.

Harry Luke, a clerk in the store of J. G. Johnson, at Traverse City, recently went into the cellar to draw some alcohol. While there, he stepped on an explosive match which caused the alcohol to ignite. Everything was in a blaze and he managed to escape with difficulty. But for timely assistance he might have been cremated. As it was the store was burned up, together with its contents. The loss will be heavy.

Hall Brothers of Kalamazoo, were recently flim-flammed out of a twenty dollar bill by a stranger who came into their drug store and tendered some change. He wanted the note to send away in a letter but lacked a few cents. He inclosed the bill in an envelope and went out for the change. When Mr. Hall opened the envelope it contained nothing. The same chap worked Dr. George Ferguson, druggist at Coldwater, for a like amount. Other merchants throughout the State have also been victimized. Officers are on their trail and arrests may shortly follow.

ILLINOIS.

CHICAGO, November 19.—It was not so much in the nature of a surprise as a regret with which the trade received the published description of the unsatisfactory feeling regarding the contract agreement. But this was only because the AMERICAN DRUGGIST had hit the nail too squarely on the head, and brought into the open light of full criticism a condition that bids fair to disrupt one of the most complete and honorable agreements ever reached. It has gone beyond mere idle rumor that some of the staunchest houses are already doubting the sincerity of their neighbors, and by a few of the most careful observers it is said that only one slight break will precipitate a smash-up that will greatly demoralize trade. This is not desirable at any time by the solid houses of this section, especially when business is rapidly recovering its strength and the prospects are bright for good, healthy trade this winter. All disturbances are unwelcome, but this one, unless nipped in the bud, would prove demoralizing to a disastrous degree. It is claimed, however, by one or two big dealers, who are anxious to maintain the compact that the fact of doubt and suspicion having been published and the disastrous results of a break being seen, will cause the wobbly ones to line up and forego the possibilities of small profits in the face of sure losses.

A HEALTHY COMMUNITY.

Physicians and dealers in drugs in Chicago are wrestling with a peculiar and unusual problem at this time. It is a question if they will be compelled to go into bankruptcy on account of slack business. This is not due to hard times, but the astounding and unprecedented fact presents itself of a community containing a million and a half of people almost perfectly healthy. That means the people on whom the physicians and naturally the druggists depend; people who demand medical attendance at good rates and pay cash for their drugs at regular prices. This condition is brought about mainly by two causes. First, Chicago's health has been almost perfect since the World's Fair, due to the extreme sanitary precautions made necessary at that time, and the polishing that the streets and alleys received. At the conclusion of the World's Fair this city was as bright and clean as a new pin and there was little chance for lurking disease of epidemic. This can not be said to obtain now, nor has it for many months, but at the same time it got ahead of the mortality record, and the health department is guarding the city very carefully.

But a second, and possibly principal reason for this stagnation in pill and powder circles, is the fact that one-third of the invalids of Chicago are taken care of at the public expense. This would appear very philanthropic and nice on the surface, but consideration shows the serious state of affairs beneath the surface. At least so the physicians, the druggists and the undertakers think. Public care of the sick means wholesale treatment and wholesale supplies. It also means the very lowest price, as the buyer for a free dispensary or institution dependent on public charity has got a sand bag of tremendous proportions. These institutions secure their supplies at the very lowest figure and are enabled to enter into the most dangerous competition with the legitimate outsiders. Chicago is entirely too healthy for the scores and even hundreds of young physicians who have come here within the past two or three years with the expectation of advancing rapidly along the road to fame and wealth, and the graduates are looking out over the broad expanse of country for their future field of work.

THE FREE DISPENSARY NUISANCE.

The maintenance of free hospitals, free dispensaries and free infirmaries by churches, charitable institutions and benevolent organizations is making inroads on the living practice of the physicians, and the profits of the drug business. The physician is called upon to give his services free to such institutions, the druggist and the manufacturer is called upon for his subscription, and good authority suggests that the fact of taking away so much practice from the physicians of the city should induce these institutions to pay a fee, proportionate to the service rendered, in every case.

A CATARRH REMEDY IN TROUBLE.

The Dr. Birney's Catarrh Remedy is again in trouble. After the daily papers got after the compound, declaring that it contained an ingredient that was dangerous in its concealed quantities, the company adopted a system of printing on the outer wrapper the announcement that the remedy contained a certain percentage of cocaine, and the accompanying

directions must be followed closely. This quieted things down for awhile, but now several prominent down town druggists have come out in open warfare against the remedy. They consider that the compound is dangerous at any and all times, and that no directions or precautions can prevent the formation of a serious and terrible habit. According to Dr. Walter M. Sempill, of Dale & Sempill, and several others (who do not care whether or not they are quoted), the remedy cannot be handled with justice to the profession and to the patrons of a first-class pharmacy. Mr. Sempill declares that under no circumstances, directions or conditions can this remedy be used with safety. He considers it a direct channel for the formation of the cocaine habit, and with several others who have had an immense and increasing sale of this preparation, has refused positively to handle the goods any more. When asked the other morning if this would have any beneficial effect, or form a public safeguard, he replied that it was not his province to dictate public policy, but that he did not consider that he would sell poison to a would-be suicide on the theory that his refusal would send a customer to some competitor.

WOMEN'S MEDICAL CLUB.

Women physicians of Chicago have established the first organization ever attempted by the members of their sex in the medical profession. The institution is called the "Woman's Medical Club of Chicago," and the first regular meeting was held in Central Music Hall three weeks ago. The new departure was inaugurated with decided success, and everything points toward a prosperous career for the novel organization.

This city has long been noted as a center for women doctors and it contains a larger number of fair practitioners than any other city in the country. The big downtown office buildings are very nearly honeycombed with their headquarters and in the residence districts their signs are numerous.

The officers of the club are: President, Dr. Gertrude G. Wellington; Vice President, Dr. Mary Weeks Burnett; Secretary and Treasurer, Dr. Mary Seymour.

A constitution containing the salient points objective in the organization has been adopted and articles of incorporation for the "Woman's Medical Club of Chicago, organized for social purposes and scientific investigation" have been obtained.

CHICAGO NOTES.

A. E. Franklin, Jr., has brought out R. C. Bair at 4401 State street.

A. L. Patterson has sold his drug store at Forty-third and Evans avenue to M. E. Hinsh.

Dr. Pritzcher, of Paulina and Division streets has been succeeded by Carl O. Elbrecht.

A new store is being furnished from Chicago stock by John E. Daily at Grand Rapids, Mich.

N. W. Murray has bought out R. C. Parks at the corner of Van Buren and Wickle streets.

Druggist J. R. Sheen has been succeeded by H. J. Herr at the corner of 45th and Wallace streets.

S. W. Reed has purchased a new stock of Morrison, Plummer & Co., for opening a drug store at Elkhart, Ind.

N. J. Keith has arrived from New York and opened the Chicago office of J. L. Hopkins & Co. at 197 Randolph street.

A. P. Burnhardt has opened a new drug store at 1803 Belmont avenue.

The Park Avenue pharmacy in Austin, formerly owned by H. E. Bond & Co., who failed last fall, has been reopened by Fred. Schnitzius.

Fuller & Fuller are furnishing the outfit for a new drug store to be opened by E. J. Fischer, at the corner of Hills and North Wells, streets.

S. E. Gross, the real estate dealer, announces that he is going to open a fine drug store at Grossdale, under the management of F. K. Bowman.

W. T. Adams, formerly of 5660 South Halsted street re-enters the field by purchasing the store of Dr. Geo. F. Wetherell, at 5400 South Halsted street.

Charles H. Dutro, one of the best known sundry men in the West, has accepted a road position with Lord, Owen & Co., and will represent them in Iowa.

New stores are being opened by J. C. Behnke, R. W. Wilson and John Lynch all of Chicago, and their stocks were, furnished by Morrison, Plummer & Co.

G. Fernitz has sold his drug store at 717 West North avenue, to B. A. C. Holzer and with Dr. Fernitz will open another store at 808 West Chicago avenue.

Chas. K. McCrum of Shoshone, Idaho, has recently purchased a handsome outfit, including fixtures, of Lord, Owen & Co. for a new drug store he is opening at Boise City, Idaho.

Dr. Franklin Chevette, one of the oldest physicians in Chicago, died on the 12th inst., at his home in Englewood. Dr. Chevette came to this city in 1853, and accumulated a fortune in his profession.

Frank Surridge, city sundries salesman for Lord, Owen & Co., has become temporary distributing agent for the cigar department, and he is dealing exclusively in 1/2 dozen assorted. The newly arrived twins are doing well.

The Grote-Greenstreet Chemical Co., of Chicago, with a capital stock of \$100,000, was recently incorporated, and the incorporators named are Robt. A. Moorman, Wm. D. Grote, Frank C. Grote and Chas. J. Greenstreet.

The drug store at the corner of 63rd and Wrights streets was recently closed on an attachment of \$640.00 in favor of the Fuller & Fuller Co. The store had been run by E. A. Seaman, but a few days before the attachment he transferred his stock to his brother-in-law, Dr. Coy.

The Peerless Manufacturing Company of Chicago was recently incorporated with a capital stock of \$50,000, Geo. F. Keller, Geo. A. Soledano and Eugene R. Lyons, incorporators. The object stated is to make toilet articles, and a building on West Lake street, has been secured in which to manufacture toilet soaps, perfumes, etc.

By the explosion of chemicals in the prescription room of the drug store of H. S. Dojouwewski, at 885 West Nineteenth street, on the evening of the 8th inst., a loss was entailed of about \$800.00. It was fully insured and no one was injured.

Although it was announced that the Shufeldt Distillery would resume operations on the 10th inst., this was not done, and the attitude of the trust is not thoroughly defined. So far only one distillery in Chicago is in operation, The Riverdale, and that is kept running principally for the manufacture of yeast.

Among the druggist visitors who dropped

in on Morrisson, Plummer & Co., recently are the following: J. K. Eddows, Geneva, Ill.; J. J. Lowry, and William Connelly, of Cresco, Iowa; H. H. Coat, of Mason City, Iowa; Charles F. Pfander, of Ackley, Iowa; John Stredle, of Stredle & McDowell, of Gibson City, Ill.; H. R. Martin, Olwein, Iowa; W. D. Allen, Bangor, Mich.; C. S. Corey, Lehigh, Iowa.

Among the recent incorporations are: The Alto Medical Company, at Chicago; capital stock, \$20,000; to establish a hospital; incorporators, John C. F. Boyer, J. J. Parker, Jr., and B. H. Ettelson. Madame Philips' Toilet Preparation Company, Chicago; capital stock, 250,000; incorporators, J. E. Philips, R. B. Ford and F. Stuart Camp; Vegetable Cure Company, Chicago; capital stock, \$100,000; incorporators, Chas. Astokes, Thomas H. Fitzgerald and Hart J. Fitzgerald. Keystone Remedy Company, at Chicago; capital stock \$100,000; for the cure of the tobacco habit; incorporators, Thomas N. McCauley, John M. Hamilton, John M. Montgomery and George W. Bacon.

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MISSOURI.

St. LOUIS, Nov. 18.—As a general thing, Missouri druggists take very little interest in politics, but this year has proved an exception to the rule and as a result of same they have elected some members of their own profession to the Legislature. This will give Missouri that long sought after new pharmacy law. A bill providing for a new pharmacy law has been before our State Legislature for many years, but notwithstanding the clamorous demands and untiring efforts of our best pharmacists throughout the State this bill has heretofore failed to become a law. The druggists have at last come to the conclusion that if they want a better pharmacy law they must have members of their own profession in the law-making body. Probably the most staunch supporter of this bill is the recently elected Dr. S. B. Spencer of this city. With this gentleman to lead the fight, and the assistance of many more recently elected friends, it is safe to say that the standard of Pharmacy in Missouri will soon be raised by State legislation.

PROF. HEMM'S LECTURE.

As it is the custom for each member of the Faculty of the St. Louis College of Pharmacy to deliver a lecture once a year under the auspices of the Alumni Association, Prof. Francis Hemm delivered his annual lecture on November 14th, as an opening to his special course in prescription work. His subject was "The Prescription." He reviewed the history of the prescription from the early ages down to the present day. Nearly every student of the college was present.

The Professor gave some very good pointers on prescription terms and work, and dwelt especially on the importance of being very conscientious in the work of this department of the drug store.

DR. JAMES' LECTURE.

On Tuesday evening, November 20th, Dr. F. L. James, the well-known editor of the National Druggist, will deliver a lecture at the St. Louis College of Pharmacy, under the auspices of the Alumni Association. His subject will be "Some Superstitions in Pharmacy, Ancient and Modern." This lecture will really be a continuation of the one delivered by the doctor before this Association one year ago. As the lec-

ture delivered one year ago was exceedingly interesting and instructive, and as the doctor is probably one of the best posted men in the pharmaceutical and medical profession in our city to-day, his friends will not likely be disappointed in their expectation of another scientific treat from the doctor.

THE DRUG CLERKS' SOCIETY.

On November 14th, the St. Louis Drug Clerks' Society held their monthly meeting. Prof. Hemm was present by a special invitation and gave the boys a good practical talk which they will not soon forget. This was the largest meeting the Society has ever recorded. The Professor took up the new pharmacy bill, which Otto Koch had secured from President Brandenburger of the Missouri Association, read it section by section and explained many points which might not be perfectly clear to the boys.

PHARMACY IN GERMANY.

Dr. Hugo Kohler, a former St. Louis druggist, who recently returned from a tour of Europe, is around telling the druggists of the glorious condition of pharmacy in Germany. The doctor says the druggists in that country would rather sell patent medicines than any other preparations, as they make more on them than they do on prescriptions. He further states that they give America credit for the fluid extracts. They do not make any of this class of preparations, but get their supply from this country. The Government of that country regulates the price for prescriptions, and Dr. Kohler says they realize much more profit even from this department than we do here in America.

NEWS ITEMS.

W. A. Roepper, Fourteenth and Pine streets, has just sold out his drug store, and will go West in a week or so.

E. F. Schober is putting up a very nice building at John and Florrisom avenues, which he will use as a drug store and residence.

Dr. H. M. Whelpley, of the Meyer Bros' Druggist has just returned from his home in Illinois, where he was called by the illness of his mother.

Fred Meyer, of the Meyer-Roux Drug Co., has recently bought Mrs. Roux's interest in this establishment, and it is now known as the Meyer drug store.

William M. Laumann, Ph.G., class of '94, is now to be found in charge of the prescription department of the Francis Sum Pharmacy, a very busy corner at Ewing and Clark avenues.

There was never so much studying done in the preparation for a State Board examination as is now going on among those who expect to come up for our next Board examination, which is held in this city, Jan. 14th, 1895.

Mrs. William Kukimey, wife of the well-known druggist at Twenty-second and North Market streets, is slowly recovering from a very severe siege of typhoid fever. Mr. Kukimey's face has been rarely seen in the store for some time.

That well-known nimrod, William Billerth, Ph.G., of the Billerth Bros. pharmacy, is down in Arkansas after a supply of game for Thanksgiving. The boys tell it on him that he owes his great success as a hunter and fisherman to the silver bullets, and fish hooks he always takes with him.

J. Fritz, the druggist at 1128 South Broadway, has also gone down in Arkansas after a wild turkey for Thanks-

giving. He does not deny using silver bullets occasionally when game is scarce.

C. Schroeder, Fourteenth and Market streets, is very low with tuberculosis. He made all preparations to go to California for the winter, but was taken suddenly worse, and has now given up the idea.

Robert P. Kettenbach, Ph.G., has move his drug store from Arsenal street, down to Ninth and Souland. This latter place is called "the drug store graveyard," by the wholesale men and city salesmen, because of the many druggists who have located there and wound up by turning their stock over to the wholesaler. Those who know Mr. Kettenbach feel certain that he will soon put an end to this old superstition, as he is not the kind of man who makes failures of going West until spring.

A small firm, comparatively almost unknown in the trade, has, by its methods of conducting business, aroused the suspicions of many wholesale druggists. It sends out of town for price lists, and when they arrive, forwards an order asking for a percentage off for immediate payment. The firm's standing is being constantly inquired about by these out-of-town firms, and it is thought peculiar that it never places orders in this city, even with firms that have exclusive control of special lines of goods. A number of years ago a man made thousands of dollars by using the same methods. He sold the goods and never paid the bills. He was arrested, but always escaped punishment by the help of a sharp lawyer.

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Women in Pharmacy.

A writer advises women to go into pharmacy. A great many of them do—when they want postage stamps.

Paris has only one pharmacy controlled by a woman, while Brussels has five. London had 1,840 female apothecaries in 1891.

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The Trade Journal Ad

The advertisement in a trade paper, read by people he wishes to reach, has a value to him above merely the orders it directly brings. He does not figure the value of the sign above his door merely on the basis of patronage it happens to attract. It is there to tell everybody who passes, whether patrons or not, where his place of business is—it is a "sign" that he is in business there, so the ad in the trade journal is a "sign" year in and year out, to those he wishes as patrons, that he is still in business.—Maritime Journal.

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The Georgia Board of Pharmacy

The Georgia Board of Pharmacy met in the Capitol, Atlanta, on November 12th and examined a class of ten. The following young men passed successfully: T. I. Brooks, Columbus, as pharmacist; Dr. A. P. Ebbert, Atlanta, as apothecary, and the others made druggist's license. Robt. M. Stanley, Macon; P. S. and Wooten Rowe, W. J. Preston and J. H. Crawford, Atlanta, and Frank C. Wright, Cure Spring. Dr. H. R. Slack was sworn in by Mr. Atkinson for a five years' term. The Board elected chairman S. C. Durban, Augusta, and H. R. Slack, La Grange, secretary. They have employed Messrs. Austin & Parks, of Atlanta, as attorneys, who will prosecute violators of the law reported to the secretary, Dr. H. R. Slack, at La Grange.

Vermont Pharmacists.

President A. W. Higgins of the Vermont Pharmaceutical Association has appointed the following committees: Executive, A. W. Higgins, of Rutland; H. A. Slade, of Montpelier, secretary; C. C. Bingham, of St. Johnsbury, H. P. Kendrick, of Barre, H. A. Chapin, of Brattleboro; committee on queries, J. F. Pierce, of Bellows Falls, G. L. LaFountain, of Burlington, C. H. Hyde, of Rutland, H. B. Chapman, of Woodstock, A. C. Randall, of St. Johnsbury; committee on trade interests, R. Brainerd, of St. Albans, H. J. Dwinell, of Montpelier, E. E. Evans, of West Randolph, O. B. Cutting, of West Concord, E. M. Stiles, of Burlington; committee on legislation, J. G. Bellrose, of Burlington, J. F. Pierce, of Bellows Falls, A. W. Higgins, of Rutland, D. W. Kelly, of North Troy, C. B. Corley, of Montpelier; committee on membership, Otis Newcombe, of Newport, F. C. Spooner, of Brandon, J. C. F. With, of Bellows Falls.

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Pharmacy Law Enacted in Vermont.

Among the visitors to New York during the past week were, A. W. Higgins, Rutland, and T. Neville, Vergennes, Vt. Mr. Higgins is president of the Vermont Pharmaceutical Association, and is in the city looking up novelties for the holiday trade, and attending to other business. The Vermont pharmacists did a wise thing in selecting Mr. Higgins as president of their new-old association. He is a man of great personal magnetism and force of character. We are informed by Mr. Higgins of the passage in the Vermont Legislature of the new pharmacy act formulated by the Vermont Association.

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University Extension Course.

At the meeting of the Minnesota Pharmaceutical Association, held in June last, an offer was received from Prof. F. J. Wulling, dean of the College of Pharmacy, State University, to deliver a course of free lectures to the pharmacists of the State, upon subjects of interest to them in their business. The proposition was warmly received, and the thanks of the association extended to Prof. Wulling for his generous offer. A committee was appointed to confer with him, make the necessary arrangements and extend an invitation to the pharmacists and their clerks to attend. The lecture course has been arranged and the lectures will be given at the pharmaceutical laboratory of the college at Minneapolis, on the following dates, at 8 P. M.:

Thursday, Nov. 15, 1894—"The Birth of Chemistry: Its Significance in the Development of the Early and Present Pharmacy." Profusely illustrated by experiments.

Nov. 29, 1894—"On the Incompatibility Encountered in Dispensing."

Dec. 18, 1894—"The U. S. P. Alkaloids; Extraction, Purification, Tests of Identity, Alkaloidal Reagents, etc." Experiments.

Jan. 10, 1895—"The U. S. P. Glucosides: Interesting Experiments in Extraction."

Jan. 24, 1895—"The Prescription: Study of Reaction, Incompatibility, etc."

Feb. 14, 1895—"Practical Organic Chemistry," in four lectures. Lecture I. "Preliminary Consideration of Organic Chemistry from a Pharmaceutical Standpoint." Illustrated.

Feb. 28, 1895—Lecture II. "Classification of Pharmaceutical Organic Compounds." Illustrated.

March 14, 1895—Lecture III. "Alcohols, Ethers, Chloroform, Chlorat, Spirituous Liquors, etc." Illustrated.

March 28, 1895—Lecture IV. "New Remedies." Illustrated.

April 11, 1895—"Volatile Oils: Adulterations and Their Detections." Illustrated.

April 25, 1895—"Fixed Oils: Adulterations and Their Detection." Illustrated.

May 9, 1895—"The Testing of the U. S. P. Compounds." Illustrated.

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FOREIGN NOTES.

The following appointments of pharmacy examiners in German universities have been announced: Heidelberg: Dr. Quincke, Professor Victor Meyer, Dr. Vulpinus, Dr. Glasner; Freiburg: Dr. Warburg, Dr. Hiltbrandt, Dr. Bauman, Herr Dorn; Karlsruhe: Dr. Engler, Dr. Lehmen, Dr. Klein and Herr Doll.

In Paris the inspector of markets injects turpentine into fish which are condemned so as to prevent the possibility of their sale. It is reported that the fish mongers have discovered some means of overcoming this odor of turpentine and that they have also found a means of coloring the gills of the fish so as to deceive the customers.

The Medical Department of the Russian Ministry of the Interior was lately called upon to decide whether a hypnotizer, who is not a physician, may take part in the treatment of a patient by hypnotism under the supervision, and on the invitation, of a medical man. The Medical Council, declaring that the methods of hypnotic treatment are well known to all physicians, and recognizing that this treatment must be regarded as a violent measure, finds that the physicians alone should be authorized to apply it to their patients.

An item is going the rounds of the press to the effect that the assassination of the French President Carnot is likely to make the fortune of Guillaume, the hardware dealer in Cetta, from whom Caserio bought the knife with which he committed his crime. Since the origin of the knife became known the dealer has been inundated with orders for weapons of similar pattern and size to that used on the fatal night at Lyons. Orders came from France and from abroad, one from Brussels being for 300 daggers. During the last month the hardware merchant has sent out over 1,000 of these articles to various places.

The subscription list opened by the Figaro for the purpose of providing funds for an institute in connection with Dr. Roux's method was closed on Tuesday last, the total amount of contributions being 431,109f. 45c. The sum of 5,410f. has been sent by Mme. Sarah Bernhardt, as the result of a performance at the Renaissance Theatre here, and M. Sardou surrendered his author's rights of 619f. 20c. on the same occasion. M. Sardou also gave over his author's fees at various theatres for one evening to the institute, thus making his contribution in this connection 1,623f. 10c.—Chemist & Druggist.

A Paris pharmacist has been the victim of a theft of morphine under circumstances which he considers new. The thief, a gentlemanly man of about 30, according to the Chemist and Druggist, presented a prescription for a solution of morphine hydrochloride 1.20, purporting to have been made out by Dr. Moty, a surgeon attached to one of the Paris hospitals. As the recipe appeared to be authentic, the pharmacist made it up and moment for paying came, the customer handed the bottle, wrapped in paper, to his client, who slipped it in his pocket and continued a conversation. When the

appeared to seek in vain for his purse, and apparently much vexed, said that he must have left it at home, but would go for it. He handed the bottle back, pending his return. When, after waiting a long while, the pharmacist opened the parcel, he found a bottle of plain water instead of the morphine.

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Schooners That Pass in the Night

Appropos of a recent novel entitled, "Ships That Pass in the Night," an enterprising Iowa druggist, as an advertisement, puts a stack of poker chips in his window and labels them "Chips that Pass in the Night."—Grocers Review. And a St. Louis saloon has in its window a half-dozen big beer-glasses labeled, "Schooners That Pass in the Night (but not at lunch time)" National Druggist.

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RANDOM NOTES.

We have received part X of Kaviratna's English translation of "Charaka-Samhita" containing the continuation of Lessons xxv and xxvi. These the translator tells us deal with the "things which are regarded the foremost ones of particular classes or groups noted for particular consequences"—anglice, specifics for certain ailments. The translator's abstract enumerates the different wines used in former times by Hindu physicians; these comprise fruit wines, root wines, pith wines, flower wines, leaf wines, stem wines, bark wines and sugar wines, consisting in all of 84 varieties. Lesson xxvi consists of a dissertation on Tastes, and this by no means dry subject receives exhaustive treatment.

One of the most attractive of the store windows in Calais, Ind., is that of Fred Waterson's, where a model of a steam engine is placed on exhibition. It was made by an engineer on the local railroad and is four feet long, with tender attached, is complete in every particular. It is called the "Schoodic." The engineer stands on a miniature track; steam may be gotten up in a very few minutes, and the engine will move rapidly or slowly as it is wished. The engine has attracted the attention of a large number of people who have praised its ingenious construction.

One of the cleverest little advertising pamphlets we have seen for a long time is published by the B. F. Goodrich Co., Akron Rubber Works, Akron, O. It is a neat 16 page booklet bound in stiff yellow paper and the comic illustrations and letterpress of the work are much superior to the average run of advertising pamphlets.

Our friend George J. Seabury, of plaster fame, is now mentioned as a candidate for the position of Inspector of Rifle Practice on the new staff of Gov.-elect Morton, to succeed Brig.-Gen. Benjamin M. Whitlock. George J. is best known in rifle circles through his connection with the National Rifle Association, one of the oldest organizations of its kind in this country. He was its secretary for a number of years, and it is said, it was largely due to his efforts that New York State purchased from the N. R. A. the shooting grounds at Creedmoor, which are now used by the National Guard, for rifle practice.

"Painting and Decorating" is the name of a dainty monthly magazine issued by the Trade News Publishing Co. of this city. With the issue for October the magazine has been enlarged and remodeled and in its present shape it is one of the most attractive class journals that comes to our desk.

W. A. Loyless, formerly manager of both the Bradfield Regulator Co. and the Swift Specific Co. of Atlanta, is now devoting all of his attention to the business of the former company, as the rapid growth of the business of the two concerns necessitates a separate management. J. G. Burkhardt, vice-president of the Swift Specific Company, is now acting as manager of that concern.

The Texas Drug Company of Dallas, Tex., appear to be building up a very satisfactory business in the territory covered by their salesmen. J. L. Lovejoy, of the firm, was seen in Paris recently, and expressed himself as well pleased with the prospects for fall trade. Business is on the continual improvement.

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The Advertising Art in Oregon.

Ponce de Leon made a mouse-colored ass of himself by chasing around in Florida looking for a fountain of youth. To-day men of sense obtain the boon that Ponce was hankering for by going to High & Storey's and being infused with new life by indulging in a refreshing shave, hair cut and shampoo.—Ashland Record.

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A Good Eye Catcher.

Printers' Ink says: "The matter printed below was distributed in Brooklyn as a circular of the full size as the official ballot for several days previous to the recent election. It could scarcely fail to have secured

OFFICIAL BALLOT.

McELHENIE & MARSLAND,
Judges of Election.

For Coughs, Colds and Croup,
PULMOLINE.

For Headache,
PHOSPO-SELTZER.

For Fragrance,
HELIOTROPE SACHET
POWDER.

For Baldness and Dandruff,
COMATIC.

For Invigorator,
COCA WINE.

For Dental Brilliance,
CORRALLODONT,
ROSODONTINE,
ROSE TOOTH PASTE.

For Easy Walking,
FRENCH CORN CURE.

For any and everything in the Drug Line,
McELHENIE & MARSLAND,
DeKalb Ave., corner Ryerson Street.

for McElhenie & Marsland a good deal of advertising, but whether it was the kind which brings business Messrs. McElhenie & Marsland are alone able to tell."

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Wulling's Pharmaceutical Chemistry.

We have received the advance sheets of a "Manual of Inorganic Pharmaceutical and Medical Chemistry" by Prof. Fred. J. Wulling, Ph.G., of the University of Minnesota.

The Manual is made up of a series of articles contributed in 1892 to the Pharmaceutical Record and those of our readers who have studied the contributions as they appeared in that journal will appreciate it when we state that the new book will fill a distinct gap in pharmaceutical literature. The new "Man-

ual" seems to have the paramount merit of conciseness coupled with brevity and accuracy in the statements made. To students who are deprived of the advantages of the personal direction of a teacher, it should prove of the highest usefulness and we hope it will command the attention which it deserves.

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"Doctorein."

The British Medical Journal says a discussion having for its aim the discovery of an appropriate title to take the place of the awkward terms "lady doctor," "woman doctor," "female practitioner," etc., has been started in the Glasgow Daily Herald. "Doctor" indicates the male practitioner; "doctress" is felt to be inadmissible. "Doctorein," plainly of quasi-German parentage, is suggested. "Doctorein Mary Walker" would be distinctive enough, but slightly clumsy and un-English. The irreverent correspondent thinks it reminiscent of margarine—an objection which may weigh with the students of the Glasgow Queen Margaret College.

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A New Commission Wanted.

A Boston druggist claims to have discovered a subtle compound that will deprive a cat of its voice without impairing the mental, moral or physical powers of the animal. If this be true, his discovery should at once be dedicated to the public and a feline devocalizing commission established in every progressive city. The world has fought caterwauling with bootjacks and profanity too long as it is.

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TRADE MENTION.

The Norwich Pharmacal Co., Norwich, N. Y., are calling attention prominently to "Unguentine" a new surgical dressing which is referred to as being antiseptic, healing and restorative. Druggists are invited to send for a descriptive pamphlet containing desirable information about this new remedy. Orders for "Unguentine" can be included in your regular orders to wholesale druggists.

Gillam's Sons Company, the widely-known embossers, printers, and lithographers of Philadelphia, have recently completed arrangements to move into a new building, the demands of an increasing business making this step necessary. They expect to be in their new building by the first of December.

In ordering gin for medicinal purposes, druggists will consult the interests of both physician and patient by specifying "Swan Gin." This is a brand which is especially advertised to the drug trade and is stocked by every reputable wholesale dealer. If you cannot procure it through your regular jobber, drop a note to Fred Ruttman & Son, sole agents, New York.

Among the recent shipments to London from the port of New York, was one lot of four tons of "Frog in the Throat?" which went out on the Chester two weeks since, while on last week's steamer a further shipment of six tons of this popular cough remedy was made to the same port. These shipments show that our cousins over the water appreciate a good thing almost as well as we do on this side. Have you noticed Hance Bros. & White's offer of liberal prizes for the best window displays? If not, write them about it, asking for their little primer on the subject.

No druggist who is at all careful of his reputation as a purveyor of standard remedies, can afford to be without a full stock of the admirable food and digestive preparations of Fairchild, Bros. & Foster. The latest addition to the list is Panopepton a readily available peptonized bread and beef peptone which is held in high esteem by physicians, being prescribed in all indications where a good, reliable and readily available peptonized food is required. Panopepton can be ordered through any wholesale druggists.

Stearns & Gordon, of 20 Cedar street, who are well known to the trade as the manufacturers of vanilla crystals and other artificial flavoring substances, have given up the perfumery department of their business, and will confine themselves hereafter to the manufacture of their various specialties. V. E. and L. C. Ostegee are their successors in the manufacture and sale of perfumery, and the business will be conducted under the firm name of Ostegee Bros.

One of the neatest and most attractive packages of confectionery handled by druggists is that put up by the Pettit Manufacturing Co., Canajoharie, N. Y. The package contains "Pettit's Wrapped Chocolate Pralines," and retails for 10 cents. It is covered with a handsomely embossed wrapper in white and gold and furnishes a most salable article. The Pettit Manufacturing Company have something to say in this issue about fine chocolates and it will pay to correspond with them for their terms and points on their plan of assisting in selling their goods.

For Winter Trade.

William M. Crane & Co., 838 Broadway, New York, are introducing their Improved "Ideal" Hot Soda Fountain as illustrated herewith. The "Ideal" fountain is claimed to be superior to numerous other makes as it is arranged on the patent non-pressure system, thus avoiding the danger of accidents from bursting due to overpressure. The gas regulator is automatic in its adjustment, and the whole apparatus

possesses the paramount merit of neatness and utility. A catalogue of the different designs stocked by William M. Crane & Co., will be sent to any reader on request.

Private Formulas.

Private Formulas and special styles of packing for pills, tablets and liquid preparations. Pills, round, oval, flat, lentiform or oblong. White, blue, pink, red, yellow or brown. Coated with sugar, gelatin or liquorice. All special formulae done up and packed in styles to conform to your taste by Wm. R. Warner & Co., of Philadelphia.

The Game of Hearts.

"Look you," said Constance Mulligatwnney.

Then she jilted him in favor of a policeman who had got his picture in the paper for accepting a bribe.

"I will be avenged," he cried, merely.

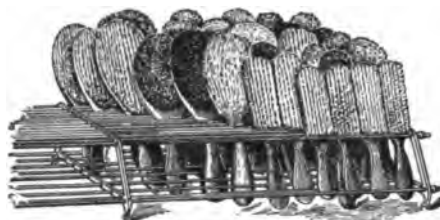
When he was cured of a torpid liver and was honored with a quarter-page portrait in the press he wouldn't notice the little girl he once had loved.

Planten's Capsules.

Our readers are invited in the advertisement of H. Planten & Son, which appears elsewhere, to correspond with that firm and to send for samples of Planten's Capsules and Perloids. Few druggists, we suspect, are ignorant of the high estimation in which the Planten capsules and specialties are held by physicians and the laity. They have been known as reliable for nearly sixty years, and are celebrated for uniform reliability. Druggists who fail to stock Planten's goods betray a lack of interest in their business, as they give uniform satisfaction.

A Handsome Display.

The Graves Brush Rack Co., have an advertisement in this issue which should be carefully read. It suggests a means of economizing on stock and at the same time increasing the selling qualities of articles which are handled wellnigh exclusively by the drug trade. We refer to the Graves Brush Rack. A good stock of brushes is one of the things



which usually engage attention about the holiday season, and the attention of the display can be wonderfully increased with the aid of the Graves Brush Rack. The accompanying cut illustrates its usefulness. Prices are quoted in the advertisement, but additional particulars can be had on application to the Graves Brush Rack Co., N. Y.

A Great Firm.

No manufacturers have accomplished more in the direction of producing what has come to be termed "Elegant Pharmaceuticals" than the widely known firm of Parke, Davis & Co. A graceful tribute to the enterprise and progress of the firm was made by the chairman of the Local Section of Chemical Industry at the last meeting in New York.* Addressing the meeting, Alfred Hy. Mason said:

"America was the first country to induce what is known as 'Elegant Pharmacy' and has been the inventor and pioneer of many devices by which life is made more pleasant and nauseous medicines even tempting. No manufacturers have done more to bring about this condition of things than Parke, Davis & Co., of Detroit. So enterprising is this firm that connected with their laboratories is a scientific department of experts in the various branches of the science of pharmacology, the members of which are devoting a lifetime to the careful study of the physical, chemical and therapeutic properties of drugs."

Parke, Davis & Co., issue a neat brochure entitled "Special Preparations" which they offer to send free to any pharmacist on application. We would urge every reader to procure a copy of this work.

A Leading Distiller of Witch Hazel.

From Thomas N. Dickinson, Jr., distiller of witch hazel extract, Mystic, Conn., we are in receipt of a letter in which he calls attention to a misprint in our issue of November 10, page 331, where we give a list of the leading distillers of witch hazel. The address of E. E. Dickinson & Co., there given as Essex County, should read Essex, Conn.

So Sav We All.

Although the last annual meeting of the American Pharmaceutical Association adjourned before the Spatula was born, we hope it will not seem presumptuous for us to express our regret that it took the course it did in regard to two matters that came up before it. One of these was the changing of its abbreviated name from "A. P. A." to "A. Ph. A.," the latter of which, while well enough for printing purposes, is much less adapted for quickly gliding off the tongue than is the former. The slight ambiguity in the meaning of the initials "A. P. A." which may now exist among druggists and others is sure to grow less and less month by month, and in a year or two no one will suppose that the letters ever stood for anything but the "A. Ph. A."—Spatula.

Good Advertising.

"77"

DR. HUMPHREYS' SPECIFIC

FOR

GRIP

77 will "break up" a stubborn Cold that "hangs on."

A small bottle of pleasant pellets—fits your vest pocket. Sold by druggists, or sent on receipt of price, 25c., 5 for \$1. HUMPHREYS' MEDICINE CO., cor. William and John Sts., New York.

The above (with plenty of white top and bottom) is a specimen of the advertising in the large Sunday papers, that has made Humphreys' Specific "77" rank with the best sellers in the trade, and all done within a few months. Send for a poster of "77" for your window. Address as above.

Oliver Wendell Holmes Defends Doctors.

Dr. Oliver Wendell Holmes has, it seems, been charged with drawing all the villains of his stories from the clerical and legal professions. Here is his defense, which makes the offense gracious—at least to members of his own profession: "I am afraid I shall have to square accounts by writing one more story, with a physician figuring in it. I have long been looking in vain for such a one to serve as a model. I thought I had found a very excellent villain at one time, but it turned out he was no physician at all, only a—I mean what we consider a practitioner of medicine. I will venture to propose a sentiment which, as I am not a working physician, need not include the proposer

in its eulogy. The medical profession is so full of good people that its own storytellers have to go outside of it to find their villains."

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A Deserved Tribute.

It is said "all roads lead to Rome"—but there can be no question but that the voices which come from Rome, whether they be ecclesiastical, scientific, or humane come with an authority which cannot be controverted. No less positive in this respect as among the various features of its work, we cite the special award made by the late International Medical Congress in favor of William R. Warner & Co., of Philadelphia. The firm was given the silver medal in recognition of the superior excellence of their pharmaceutical products.

We, of our own land, hardly need this endorsement to either create or strengthen an approval of Warner & Co.'s varied manufacturers. They have been with us so long, have been in the front at all times among preparations of their class, that if they were faulty in any way the "strong light of the throne" which is ever on the leaders would have disclosed it long since. But it is pleasant to know that in all climes, among all tongues and before the most august critics, they continue to maintain their pre-eminence.

—:o:—

Diagnosis Extraordinary.

The following constellation of brilliant scintillations is just now in the zodiac of the medical heavens:

A GRIM VIEW OF IT.—The death of an ossified man in Tennessee is reported. He died hard.—*Chicago Tribune*. This is as bad as the man who swallowed a thermometer and died by degrees; it suggests also the case of the consumptive undertaker who died of a coffin.—*Medical Record*. These remind us of a man who choked while eating an apple, and died of apple-plexy.—*National Medical Review*. It was in a St. Louis hotel that a Pike county farmer blew out the gas, and died from gastritis.—*Meyer Brothers' Druggist*. Not any worse than the man struck by an engine; verdict, died from locomotor attack.—*Montreal Pharm. Journal*. Still worse the case of that pie-eating dyspeptic of Tiffin, for he died of pleura, superinduced by typhilitis.—*Galliard's Med. Journal*. The other day a negro in Southern Georgia ate six watermelons. He died of melancholia.—*Atlanta Med. and Surg. Journal*. Very good; but have you ever heard of the circus man who was accidentally sat down upon, during a performance, by the largest pachyderm in the menagerie. He died of elephantitis.—*The American Practitioner and News*.

Do not China's symptoms in the present trouble with Japan point to an acute attack of (h)orea?

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The Use of a Telegraphic Code.

Many houses in different lines of business have found it convenient to have a private telegraphic word for each article in their price lists, but we believe that Seabury & Johnson are the first in this country to publish one for use in the drug line, or at least in their particular branch of business.

It often happens that surgical dressings and other goods are needed in a great hurry, especially in cases of accidents and epidemics; in such cases a telegraphic code enables persons to order at small expense a large assortment of goods for prompt shipment. Some of S. & J.'s customers, however, have used it in making out regular orders sent by mail, which entails unnecessary trouble for both parties, although in some instances, no doubt, a source of amusement.

This is not the only feature of Seabury & Johnson's new price lists, which is in the line of improvement; the index to

their catalogue is arranged alphabetically in red, dictionary style, so that instead of having to look for the page in the index and then find the place, customers can run right through the book until they reach the proper page. And yet there are some people who do not appreciate the convenience, and object to this arrangement.

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Some Handsome Drug Stores.

The revival of business among druggists is best shown by the number purchasing new outfits, which is unusually large. One firm for instance, the Dawes Mfg. Co. of Pittsburgh, Pa., have sold sets of their shop furniture to the following firms within the past two weeks:

W. E. Cline, Belton, Texas; H. G. Harrington, Crockett, Texas; Wm B. Conley, Whitehall, Mich.; E. A. Moore, Sackville, N. B.; L. O. Langard & Co., Brooten, Minn.; W. D. Allen, Bangor, Mich.; G. N. Osenton, Montgomery, W. Va.; R. J. Greening, Conshatta, La.; Chas. H. Law, Menominee, Mich.; Bulmanier-Frank Drug Co., Portland, Oregon; Dr. Buchanan, Louisville, Ky.; W. J. Gibson & Co., Evansville, Ind.; Chas. K. McCrum, Shoshone, Idaho; C. X. Stokes, Rushsylvania, Ohio; Burns & Etter, McMinnville, Tenn.; C. W. Booker & Co., Bellbuckle, Tenn.; Collander & Preston, Azusa, Cal.; W. H. Burtnett, Camargo, Ill.

The number of the sales, however, is probably due quite as much to the excellence of the goods furnished by Dawes as to the general business revival. In fact if the reports of those who have used this shop furniture can be accepted as evidence the excellence of the ware is the chief factor.

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Wholesale Druggists' Prices.

The changes which have taken place during the past fortnight in the prices at which retailers usually purchase goods in small lots from wholesale druggists are mainly in the direction of a lower basis, and reference to the following paragraphs will show the important fluctuations:

BLUE VITRIOL has declined and is now quoted 5 @ 8c.

ERGOTIN is materially lower in sympathy with easier values for the crude material. We quote the range at 82 @ 85c.

GUM ARABIC is in better supply and prices for firsts have declined to 50 @ 55; powdered is also lower and quoted 60 @ 65c.

GUM CHICLE is advancing with the current sales at the range of 80 @ 85c.

MACE is easier and sales are making at the range of 55 @ 65c, a decline of 5c.

MENTHOL is lower and one quotation has been revised from 50 @ 55 to 45 @ 50c.

OPIUM has not sustained the recent advance and values have receded since our last from \$2.60 @ 2.75 to \$2.50 @ 2.65.

OILS.—Almond, expressed is easier and the price for best grades has declined 5c. Cottonseed is lower, with 45 @ 55c the ruling figures. Rose otto has declined 25c and our quotations are nominal at \$9.00 @ 9.50.

ORRIS ROOT, Florentine has declined from 87 @ 42c to 80 @ 85c. Powdered is lower in sympathy and selling at the same figures.

WAX, Carnaruba, has advanced materially in the interval and we are now quoted 24 @ 30c; former price, 18 @ 22c.

Review of the Wholesale Market.

NEW YORK, Nov. 22, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

The condition of the general market cannot be described as satisfactory, there being still a noticeable absence of important demand from interior dealers and a general indisposition to extend operations beyond jobbing purchases. The distribution in the aggregate, however, is fair and dealers are confidently anticipating a revival of interest in the market, though it is fully known that no marked increase in the distribution will be felt until the close of the year. Prices on most lines are fairly well sustained with few changes occurring. Ergot continues to advance. Caffeine and its preparations are firm at the advance and supplies are offered very sparingly. Camphor has declined. Castor oil is lower. Opium is fractionally easier. Foreign quinine is easier. Canada balsam fir is lower. Corigliano liquorice is firmer. Dragon's blood is scarce and higher. Carbolic acid offers at slightly easier prices in drums.

ADVANCED.

DECLINED.

Russian cantharides.	Camphor.
Ergot.	Castor oil.
German fennel seed.	Actate of lime.
Brazil wax.	Opium.
Nitrate of soda.	Quinine.
Gum arabic.	Coriander seed.
Gum tragacanth.	Canada balsam fir.
Caffeine.	Ipecac root.
Dragon's blood.	Senega root.
Corigliano liquorice.	Golden seal root.
Russian anise seed.	Manna.
Matco leaves.	Sicily sumac.

ALCOHOL is maintained by the trust producers at \$2.36 @ 2.40. This price is however susceptible to competition from independent distillers and is in some instances shaded to meet the market.

ARNICA FLOWERS of good quality are offered in the market down to 7½c. The general asking price, however, is 8 @ 8½c.

BALSAM FIR, Canada, is in good supply and jobbing with fair activity. Holders are quoting \$2.50 for barrels. The jobbing quotation is \$2.60.

BALSAM TOLU is quiet but firm at 26 @ 27c., the range of the market as to quality.

BUCHU LEAVES, short, meet with moderate inquiry with current sales at 7½ @ 8c. Long are held at 22c.

CAFFEINE is extremely scarce and fancy prices are demanded for the small supply available. The lowest open price named is \$8. Reference to the cause of scarcity will be found in our Philadelphia letter. See news columns.

CANTHARIDES, Russian, are stiffening in value and prime quality goods are maintained firmly at 67½ @ 70c.

CASSIA BUDS upon spot do not vary from 19 @ 19½c., and we are reported sales of some 50 cases at this range. A lower range of values may be expected upon arrival of new goods.

CASTOR OIL has been lowered by the manufacturers to 10c @ 10½c., for bbls. and 10½ @ 11c., for cases. The revision in prices is the result of efforts made to meet foreign competition.

COCA LEAVES are more freely inquired for, and we hear of numerous jobbing sales of Truxillo and Huanuco, the former at 20c. and the latter at 30c.

CUBEB BERRIES are selling very slowly. Prices are without quotable change, though they are regarded as nominal.

CUTTLE BONE is selling quite freely in jobbing quantities at 8½c. for Trieste, the import cost exceeds this quotation.

COLOCYNTH APPLES, Spanish, are firmer; holders now requiring 22@24c. A sale of 800 pounds is reported at the inside price. Trieste continues held at 45@48c.

ERGOT continues inquired for and a hardening tendency is noticeable. German is held at 21@22c., though good grade at the inside figure is rather difficult to obtain. Best Spanish is quoted at 25@26c., with inferior stock of the same obtainable at 21c.

JUNIPER BERRIES are offered at 2¼@3c., with numerous sales at the inside figure.

INSECT FLOWERS are advancing at the source of supply though prices here are nominally unchanged. Contracts for powder continue making at 15@18c.

LYCOPodium is higher, the lowest open price upon outside brands being now 50c. We quote Politz at 51@52c.

MANNA continues rather easy in tone with large flakes offered at 70c., and small 25c.

MATICO LEAVES are quiet, scarce, and the tendency of prices is toward a higher range. Small sales are making at 25c.

MORPHINE of foreign make is offered in some instances below the regular quotation or say at \$2.15 for eighths.

NUX VOMICA is meeting with about the usual jobbing inquiry and with the stock under good control the market is quoted steady at 2½@2¼c., though it is deemed unlikely that bids of 2c., would be turned down.

OPIUM continues dull and lifeless, and prices may be regarded as entirely nominal. Cases are held at \$2.25@2.27½, though there are rumors of quiet shading on these figures. For jobbing quantities \$2.30 is asked, and a moderate consumptive demand is reported; powdered continues held at \$2.75@2.85 though the inside price is shaded in occasional instances.

QUININE continues in fair jobbing demand, and numerous sales of foreign make are reported at the range of 24@24½c. The sales for the past week reached a total of 50,000 ounces.

SENNA LEAVES are in slightly improved position, Alexandria being regarded as particularly strong, owing to a failure of the crop, due to drought. The tendency is regarded as upward, newly imported lots being actively competed for.

VANILLA BEANS are moving out quite freely in jobbing quantities, and at well sustained values. We are reported sales of 300 pounds whole, and cuts at our quotations say \$7@13.00 for the former and \$5.00@6.00 for the latter.

DYESTUFFS.

CUTCH is without important change. Jobbing sales are making to a moderate extent upon the basis of 4¼@4½c., for bales as to quality.

DIVI DIVI remains quiet with the nominal range \$60@70.

GAMBIER is in improved inquiry for consumptive purposes, and numerous spot, and forward delivery transactions have come to light. Spot is held at 4¼@4½c., ex-store and 4½c., ex-vessel to discharge. The price to arrive is main-

tained at 4¼@4½c., for steam and sail, and forward shipments continue held at 4.07c., and 4.18c.,@4.2c., respectively.

GALLS: Blue Aleppo are firmly held at 13¼@14c. China are firm at 10½@11c.

SUMAC, Sicily, is firmer with \$65 asked in most instances for best brand.

CHEMICALS.

ACETATE OF LIME is offering with increased freedom, though momentarily there is very little demand for the article. Brown is now obtainable at \$1.00@1.05 and grey at \$1.50@1.55.

ACETIC ACID is quiet, but the market appears to be thoroughly well sustained at \$1.62½@1.87½ as to quantity for commercial.

ARSENIC, white is steady and in moderate jobbing request at 3½@3¾c., as to brand.

BLEACHING POWDER is maintained at 1¼@2c., with a fair consumptive demand at this range.

BLUE VITROL is maintained at 3¼@3½c., as to quality though sales of round parcels at the inside are the exception.

BRIMSTONE, Crude seconds, remains quiet. Spot quoted \$17.00 to arrive \$16.75 and forward shipments \$16.50@16.75.

CHLORATE OF POTASH appears firmly maintained at 10¼c., for crystals, this being a uniform figure for jobbing quantities and parcels.

CAUSTIC SODA is steady at the established values with moderate trade reported.

CARBOLIC ACID in drums is offered spot and forward, at 12c. Pound bottles are maintained at 18@19c.

CREAM TARTAR continues to offer at 17@18c., for crystals and powdered respectively; the demand is confined to small and unimportant lots.

NITRATE OF SODA is very firm. The stock appears under excellent control and held under \$2.12½@2.15 for parcels ex-port.

NITRATE OF STRONTIUM is meeting with better inquiry and sales at 7¼c., in barrels, and 8c., in kegs have taken place in the interval.

QUICKSILVER is firmer and values have advanced 1c., since our last. Among other transactions we are reported sales of 200 flasks at 50@51c.

OXALIC ACID does not offer under 7¼c., and contracts are making for delivery during next year at this value.

ESSENTIAL OILS.

ANISE is held by many in the trade at \$2.37½@2.40, but most holders are willing to accept orders upon the basis of say \$2.35@2.37½.

BERGAMOT is well sustained at previous values, current sales being within the range of \$1.75@2.10.

CASSIA is without important change, \$1.20@1.25 is asked and received for the lots which have changed hands in the interval.

CUBEB is yet held at \$1.20@1.30, though the trade requirements are very moderate at the moment.

PEPERMINT remains quiet but steady. Bulk is maintained at \$1.60@1.75 while the nominal price for H. G. H. is \$2.25. We are reported a sale of ten cases of the latter to arrive for export at \$2.20.

WINTERGREEN artificial (Methyl Salicylate) is firmly held at the combination price of 95c.@\$1.10 as to quality. Pure is jobbing rather slowly, but the market is firm at \$1.30@1.40.

GUMS.

ALOES has been in good demand with sales reported of some eighty boxes mass curacao at 2½@2¾c. Gourds are given little or no attention.

ASAFETIDA is taken by the trade in moderate quantities at 25@40c., and the market is firm at this range. The market is now well supplied with the different grades.

CHICLE has improved in demand with sales reported of about 75,000 lbs., at 23@24c. The market at the close was decidedly stronger with 24c@25c., quoted for additional parcels.

CAMPHOR of both foreign and domestic manufacture has declined. The price of Japanese in 2 lb., cakes being quoted 37c., while domestic in barrels and cases is quoted 37@38c., respectively. The reduction in the price of domestic is attributed to the growing competition of the German product.

ARABIC continues firm at the recent advance, but the higher tendency of prices has had a restricting influence upon the business. We quote sorts at 16@17c.

SENEGAL is in moderate request at the previous range of say 10@11c., for sorts, and 15@22c., for French picked.

SHELLAC is reported in good statistical condition, the stock in London being estimated not to exceed 19,000 cases. There is a fair inquiry from consumers and the tone of the market is strong. D. C. is now held at 34c.

ROOTS.

ACONITE is firmly held at 9@11c., for German with small sales at these figures.

ALKANET is selling from jobbers' hands at the range of 18@20. There is a noticeable scarcity in this variety.

GINGER is yet held at 14¼@17c., for bleached, and 12¼@14c., for unbleached with moderate jobbing sales at this range.

GINSENG is in fair active jobbing request with current sales at the range of 6¼c @ 6½c. Local buyers are prepared to pay \$4 for Canada, Vermont and Northern Pennsylvania, \$3.50 @ 3.60 for South Pennsylvania, Michigan, Indiana, Illinois and Northern Ohio; \$3.25 for Wisconsin, Iowa, and Minnesota; \$3.85 @ 8 for West Virginia, Southern Ohio, Southern Indiana and Southern Illinois; \$2.72 @ 2.90 for Maryland, Virginia and North Carolina, and \$2.50 @ 2.70 for Alabama, Kentucky and Tennessee.

KAVA KAVA is easier with sellers at 16c

IPECAC continues to offer at \$1.10@1.20 as to quality, though only a moderate inquiry is experienced.

GOLDEN SEAL continues held at 19c., though the demand momentarily is limited.

SARSAPARILLA, Mexican, is in satisfactory demand for consumption and holders are quoting at 7c., as an inside price; but as this appears to be too high for the ideas of buyers few large transactions are to be noted.

SENEGA remains quiet at 28c., for Minnesota.

SNAKE has been selling in moderate amounts at 30c. best grades are reported scarce.

SEEDS.

ANISE, Italian, is offering from first hands at 7¼@8c., for prime green. Russian, is scarce and now held at 6½c., as an inside price. Star is quoted 18c.

CANARY continues quiet, though the price is maintained at 3¼c., for Sicily and 3c., for Smyrna.

CARAWAY, Dutch, does not offer below 6½c., and it is deemed likely by some in the trade that prices will go higher.

HEMP, Russian, is firm. Holders demanding full 2½c.

MUSTARD, California, continues very quiet. Yellow held at 8¼ @ 8½c and brown at 8 @ 8¼c.

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"Well bought is half sold" Read the "trade notes" and market notes in every issue.

:O:

The Banner Pharmaceutical Journal.

I have taken the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD since August 1877, when it was published as a monthly under the title "New Remedies," and I still consider it the banner pharmaceutical periodical. The prices current and news departments make it wholly indispensable to any druggist who is in business for revenue. F. H. EDMUNDS.
FREDONIA, N.Y.

KOLA, THE WONDERFUL DRUG.

KOLA, the seed of *Sterculia acuminata*, bids fair to attain a new and remarkable vogue in the world of medicine. Pharmaceutical writers are attracted to it as a source of excellent descriptive matter; rival firms of manufacturing pharmacists are making efforts to establish claims to priority as introducers of the remedy, and investigators of high repute are giving renewed attention to the study of its characteristics and chemical constitution.

To those who are familiar with the history of Kola prior to and subsequent from its first real introduction to materia medica and therapeutics by Dr. Edouard Heckel, of Marseilles, in 1883, this late accession of interest in the drug will not perhaps appear either strange or remarkable. It was clearly presaged in an editorial article in the *Pharmaceutical Record* of June 8, 1892, when in a brief mention of the ups and downs of Kola, we ventured the assertion that a competence awaited the enterprising manufacturer who would devote his attention to exploiting the remedy. It may not be without profit, in view of the recent developments to reproduce here a portion of the article referred to.

Alluding to its early reception by therapeutists, we said:

"Scarcely any drug attracted more attention at the time of its introduction to the domain of materia medica and therapeutics than the seed of the *Sterculia acuminata*, and probably no other remedy has since afforded as striking an illustration of the greatness and decadence which marks the history of so many well-known therapeutic agents. The cause for the neglect into which the Kola nut has fallen of late lies principally with its early sponsors, who pushed its claims with a vehemence and an insistency, which, in the case of a drug whose action had not yet been fully studied, was to say the least, premature."

In the editorial article in which these sentences occur renewed attention was directed to the probable value of the remedy; and its possibilities as an important addition to pharmacy were fully emphasized. As noted above it seemed to us then, in view of its attributed properties of increasing the capacity to bear bodily fatigue, allaying the appetite and assuaging thirst, that a handsome competence awaited the enterprising manufacturer who would introduce a line of Kola beverages. A reply

to this came speedily in the announcements of different firms who had apparently lost no time in acting upon our suggestions and various compounds of Kola, adapted for use as beverages or as medicinal agents, soon made their appearance.

Parke, Davis & Co., of Detroit, were among the first in this country to procure supplies of the drug and present it in a form adapted for use as a medicament. In addition, they published notes on its pharmacognosy, chemistry, pharmacology and therapeutic properties. Thus introduced, the remedy found a certain favor with physicians and pharmacists. It was taken up by the National Formulary Committee of the American Pharmaceutical Association and a formula for the preparation of a fluid extract of Kola was included in the National Formula under the title "Extractum Sterculiæ Fluidum."

It has, however, remained for the firm of Frederick Stearns & Co., Detroit, to effectually bring the valuable properties of the remedy before the attention of American physicians. This they have done in an elaborate monograph on Kola, in which the pharmacognosy and physiological and therapeutic actions of the drug are carefully studied and presented to the profession.

The monograph is published under the direction of Dr. F. E. Stewart, who has charge of the firm's scientific department. He is the author of the part devoted to the study of the physiological and therapeutic actions of the drug. Its pharmacognosy has been studied by J. O. Schlotterbeck of the University of Michigan, and the results of his work are presented in this monograph with creditable completeness. In fact we know of no similar work in the English language which gives so complete a description of the plant, its names and synonyms, habitat, history, botany, cultivation, substitutions and adulterations, and chemistry. The best foreign work extant is Professor Heckel's contribution to the "Annals of the Marseilles Institute of Colonial Botany and Geology," entitled "Les Kolas Africains," and this Messrs. Stearns have drawn upon largely for the descriptions and illustrations contained in their monograph. The reproductions of illustrations from Heckel's work have been executed with remarkable fidelity to the original; and the design of the monograph with regard to the division of subjects is most attractive—all contributing to an unusually meritorious piece of compilation.

A NEW HANDBOOK OF PHARMACY.

II.

IN continuation of the review of Professor Coblenz's "Handbook of Pharmacy," commenced in our issue of September 15 we come to the consideration of the chapter on Solution. This important subject is treated in great detail; over twelve pages are given up to it and the different apparatus used in the solution and generation of gases are figured. The "Lysimeter," an apparatus devised by Dr. Charles Rice for determining solubility is illustrated and a practical example of the mode of using it is quoted. The "Lysimeter" consists essentially of a glass tube, provided at one end with a well-ground stopper, while the other end is cup-shaped, there being a contracted neck between the cup and the main tube. The Lysimeter is provided at the cup-shaped end with a small thimble-shaped percolator containing a pledget of cotton. The percolator is prevented from dropping out by a platinum wire fastened round the contracted neck of the tube and crossed over the mouth of the percolator.

Supposing it is required to determine the solubility of morphine in boiling alcohol. A super saturated solution of morphine in boiling alcohol is prepared. The Lysimeter, stoppered at the upper end, is inserted in the liquid, and when the tube has acquired the temperature of the boiling liquid the stopper is removed. The removal of the stopper permits the upward flow of the liquid, which then rises in the tube as far as the quantity of the liquid will permit. The stopper is then inserted, the tube is withdrawn, turned upside down, the thimble-shaped percolator removed and a glass stopper inserted in its place. The tube is then carefully weighed, compared with its tare, and the increase in weight determined. The weight of the dissolved morphine is found by evaporating the contents of the tube into a tared beaker or capsule. The process is an extremely simple one, and with highly volatile solvents, it will be found especially useful.

The preparation of percentage solutions, about which so much has been written of late, occupies about three and a half pages. The difference between percentage by weight and percentage by volume is explained by examples and the author's definitions are simple and should be easily comprehended. The assumption made by many pharmacists that one grain of a salt occupies the same space as one minim of water is alluded to here; and to overcome the deficiency in volume where all ingredients are weighed (which is the correct method of making percentage solutions) we are advised to make a quantity a little in excess and then to dispose of what is not needed as we may see fit.

The next important chapter is that in which crystallization is studied. More space than usual has been given to this,

and the illustrations are certainly superior to any that we have seen in recent American or English pharmaceutical literature.

The chapter on filtration is also remarkably full and contains many new illustrations; but the subjects coming under this head seem to us to be somewhat poorly presented. The figures of an "Improved Porous Filtering Plate" are interesting, but the instrument itself is of little value. None of the various devices which have been thus far tried for accelerating the flow of liquids through a paper filter has proved a complete success, and few can be considered in any way superior to the old plan of simple filtration through a plaited filter. The chapter on percolation which follows presents the subject in a very complete and satisfactory manner, numerous illustrations of apparatus being shown.

Part II of the work is devoted to a classification of pharmaceutical preparations. In arranging these in groups, the physical and pharmaceutical characteristics of the preparations are of course taken into consideration. The two chief divisions, Liquids and Solids, are subdivided into Solutions and Mixtures, and For Internal Use and For External Use respectively.

Part III takes up the Art of Dispensing. The elementary principles of Latin grammar as applied in prescription writing are fully expounded, and examples of correct construction are included.

The practical pharmacist will find a good deal to interest him in the Chapters on Explosive Mixtures and Incompatibilities. We had expected a fuller treatment of the former subject; any experienced pharmacist should be able to complete the half-page of examples on page 898, with examples taken from his note-book. We do not find, for instance, any mention made of the reaction which occurs in mixtures containing fluid extract of *uva ursi* and spirit of nitrous ether or of the reaction which liberates carbon dioxide, when glycerin, bicarbonate of soda and borax are mixed.

The increasing importance of volumetric analysis in pharmacy receives recognition in the "Handbook" in the amount of space devoted to the consideration of the subject.

The evident pains which Professor Coblenz has taken to restrict the scope of his "Handbook" to the actual needs of pharmacy students should lead to its general adoption as a text book of the science and art of pharmacy. It is essentially a text-book, and in this respect differs from some other works of this class, which apparently aim to cover the whole range of pharmacy and related subjects, with the result in many instances, of inflicting upon the student ponderous encyclopedias, too bulky to carry, and too varied in their contents to permit of satisfactory study. The plan of Professor Coblenz's work is admirable, and he is clearly to be congratulated on the result of his labors.

DIPHTHERIA ANTITOXIN.

ELSEWHERE in this issue we give a resumé of several clinical reports upon the use of antitoxin in the treatment of diphtheria. In these, as in practically all the cases in which trained observers have tried the new "serum therapy," the reports are in the main decidedly favorable. The precise measure of benefit to be derived from the treatment appears to depend largely upon the stage of the disease in which the remedy is exhibited. As a prophylactic the verdict is almost or quite unanimously favorable. The efficacy of the serum as a therapeutic agent after the development of the disease seems to decrease rapidly as the disease advances, though an improvement generally follows the injection of the antitoxin solution, even in the advanced stages of diphtheria. It seems that as a therapeutic agent it must be used boldly, full doses being given at the earliest possible moment.

SUPPLIES. BUT very limited supplies of the serum have reached this country since our editorial reference to the subject in the issue of November 10th, and the probabilities are that for the next month or so, little or no antitoxin can be secured from abroad. The manufacture of the serum has, however, been undertaken in this country by Messrs. Parke Davis & Co. on a large scale, and by Dr. Gibler, of the Pasteur Institute, who has already furnished a small supply through Messrs. Lehn & Fink, while various boards of health have taken the initial steps toward preparing their own antitoxin.

BOARDS OF HEALTH ACTING.

EARLY in November a member of the staff of the United States Marine Hospital service at Washington had progressed so far as to begin the immunization of a horse by the injection of the toxin solution. The health authorities of Pittsburg, Chicago, New York, and other cities have taken the matter up, and in a few months we will probably have a sufficient supply to meet the needs of the large cities, though some time will probably elapse before a sufficient quantity of the serum will be available to meet the demands from the smaller towns and the rural districts.

PRIVATE INITIATIVE. IN the interesting chronicle of his observations of American manners and customs, which is being published in the *New York Herald* under the title of "Outre Mer," Paul Bourget frequently finds occasion to refer to the many instances in which important movements of a public nature are due to private initiative. This observation is given additional force in this connection, since a private citizen has placed the sum of \$30,000 at the disposal of the New York City Board of Health for the production of diphtheria antitoxin, and

with this liberal sum at their disposition the Board has already set to work. The *New York Herald* has also opened a public subscription for supplying antitoxin to the poor.

A PRELIMINARY REPORT. A PRELIMINARY report has been submitted to the Health Department of the city of New York by Dr. Herman M. Biggs and T. Mitchell Prudden, which we present in full in our New York news notes. In this report attention is called to the appearance in this market of spurious preparations claiming to be antitoxin solutions, but which are wholly devoid of therapeutic properties. Since biological tests alone can prove the worth of the serum, great caution should be exercised in procuring supplies.

METHODS OF DISTRIBUTION. If diphtheria antitoxin fulfills its present promise it will probably take a position in our armamentarium medicamentum somewhat similar to that occupied at present by vaccine virus. The health departments will probably furnish the larger portion of the supplies used in the cities as they now do with vaccine virus, while the wealthy classes in the cities and all those living in remote sections will obtain their supplies through the physician, who may purchase either direct from the manufacturer or through the local pharmacists. The interest of the pharmacist in the subject therefore is likely to be more of a scientific and humanitarian than of a commercial character; though by keeping thoroughly posted on the subject he may be enabled to reap material commercial advantage as well as professional prestige in the introduction of the serum in the smaller cities and towns.

AN IMPORTANT LIQUOR LICENSE DECISION.

THE sale of intoxicants by the pharmacist has probably been the subject of more legislation and litigation than any other phase of his calling, although it is of comparatively small commercial importance. This is largely the fault of those who have abused the privileges given them in this direction in some States to such an extent as to make the prohibitionist regard the pharmacist as occupying a plane of equality with the liquor dealer.

THE KENTUCKY COURT OF APPEALS. THE latest important addition to the legal literature of this subject is a decision handed down by Judge Hazelrigg of the Kentucky Court of Appeals in the case of the Commonwealth vs. J. W. Fowler, in which the decision of the lower court is reversed and a decision adverse to the Appellee, Dr. Fowler, is rendered.

A TEST CASE. As will be remembered by our readers, this was a test case upon an agreed statement of facts as follows: The defendant,

Dr. J. W. Fowler, a legally qualified pharmacist of Louisville, Ky., sold to R. H. Thompson one pint of whisky, which was sold and purchased in good faith to be used as medicine, though not prescribed by a physician. The law violated provides that druggists may only sell liquor in quantities of not less than one quart (not to be drunk on the premises), except on the prescription of a physician. The license fee is fifty dollars per annum. The constitution of the State of Kentucky grants to the legislature the right to "by general laws only, provide for the payment of license fees on franchises, stock for breeding purposes, the various trades, occupations and professions, or a special or excise tax." The defense advanced the plea that the tax was unconstitutional in that it was not a tax upon the occupation of a druggist, and was not a special or excise tax.

SALES ON PRESCRIPTION. THIS contention was upheld in the lower court, and a decision of the Court of Appeals was cited (*Saris vs. Commonwealth*, 88 Ky., 832) in which it was laid down that the "power of the legislature to prohibit the prescription and sale of liquors to be used as a medicine does not exist, and its exercise would be as purely arbitrary as the prohibition of their sale and use for religious purposes." The Court of Appeals however, overrules the decision of the lower court on two counts. The opinion of the lower court as to the unconstitutionality of the tax if considered as a revenue tax is admitted to be correct, but Judge Hazelrigg does not consider it as matter of revenue but simply as the exercise of the ordinary police power of the government, which power is not defined by the constitution or its extent specifically limited. This argument against the tax therefore falls to the ground.

LIQUOR AS A MEDICINE. THE contention that the sale of whiskey as a medicine is harmless, and, indeed, often useful and necessary, that it is not within the legislative competency to prohibit it, and that to do so is in violation of a natural right, is conceded by the Court of Appeals in this as in the case of *Saris vs. Commonwealth* above referred to, but this sale as a medicine must be made on the prescription of a physician. This provision is held by the court to be entirely reasonable, in the following words: "It has long been the settled policy of this State, and, indeed, of every State in the Union, to confine the sale of intoxicants, when made in small quantities to druggists and physicians to be used as a medicine (*Commonwealth vs. Reynolds*, 89 Ky., 150). It is in the line of the physician's profession to prescribe medicines, not in that of the druggist or pharmacist." There was a dissension from this decision, and a dissenting opinion may be handed down. It is also reported that there

is a possibility of the decision being reversed in the new court which is soon to assemble.

THE LAW IN NEW YORK. THE precedent set in the case of *Saris vs. Commonwealth* and the opinion in support of that precedent cited in the above paragraph seems to have bearing upon the conditions existing in the State of New York. In this State by a recent enactment druggists are required to take out a \$20 license for the privilege of putting up prescriptions containing whiskey. Naturally this law has not been generally enforced and a very large number of druggists have no license at all except the U. S. retail liquor license. In the town of Jamaica, however, the excise commissioners have recently passed a resolution that the excise regulations shall be vigorously and rigidly enforced. Taken literally this would mean that each pharmacist would be compelled to take out a prescription liquor license, but in an interview on the subject Commissioner Clayton, who is the most radical and aggressive of the commissioners, said:

I think the law is decidedly unjust and not framed in the spirit which is supposed to inspire excise legislation. It provides that druggists shall pay a license fee of \$20 for the privilege of putting liquor in prescriptions written by physicians. Such regulation is not only unjust but absurd. The Excise law is framed to regulate the sale of liquor as a beverage. The use of liquor in a prescription makes it a medicine, and is administered as a necessity. There is no reason at all, in my estimation, why a druggist should be forced to pay \$20 to the town because his business demands that he shall compound prescriptions. The idea of a druggist turning away a prescription in which "spiritus frumenti" appeared because he did not happen to be licensed! A patient might die through the druggist being overscrupulous. It seems, however, quite right, that druggists who sell liquor in bottles or in any way except in prescriptions fairly come under the Excise law, as they are simply dealers in liquors and should have what is known as the "store" license, which precludes the liquor being drunk on the premises. This privilege involves a fee of \$50. There is no reason why a man who sells drugs should be permitted to sell without a license any more than a man who sells groceries should enjoy that privilege. We shall surely prosecute all violators of the law, whether they are liquor dealers or druggists, if the evidence can be secured. There are many saloonkeepers in the town unlicensed, who violate the law with apparent impunity. Some of them, it is said, have never even applied for licenses. We think the law stands for something. We have already secured evidence against two unlicensed dealers, and their cases will be presented to the Grand Jury.

THE LAW IN MASSACHUSETTS. THE New York law is certainly unjust where even the excise commissioners themselves do not give it their support. The law of Kentucky is somewhat better even under the last decision above referred to, but it appears from the workings of the new Massa-

chusetts law that it comes nearer filling all the conditions of the question satisfactorily than any other State law. In Massachusetts druggists' liquor licenses are granted only to qualified druggists who are certified by the Board of Pharmacy as being proper persons to hold such liquor licenses. This certificate is a different thing entirely from the mere registration certificate, since it refers rather to his moral than his mental qualifications. This places in the hands of the pharmacists themselves the responsibility for the character of those handling liquors for medicinal purposes.

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The Alcohol Question in Court.

THE question of whether or not we are to have tax-free alcohol under the Hoar amendment has been formally brought into court by the suit just begun

by the Brown Chemical Co. of Baltimore in the Court of Claims at Washington against the Government for rebates on alcohol used by them in manufacturing. The amount sued for is \$465 80. This sum represents taxes paid on 516.94 proof gallons of alcohol, used from Aug. 28, 1894, when the tariff law was passed, to Oct. 18.

It will be remembered that during the last session of Congress Senator Hoar offered an amendment to the tariff bill in which it was provided that alcohol used for medicine and the arts should not pay the internal revenue tax.

Subsequent to the enactment of the act the company notified the Secretary of the Treasury that it was a manufacturer, finding it necessary to use alcohol in the arts and in medicinal and like compounds. It also requested the Secretary to furnish a

copy of such regulations as might be adopted under the sixty-first section of the tariff law of 1894. The company also notified the Collector of Internal Revenue for the district wherein its business is carried on that it was ready at any time to satisfy the collector that the alcohol was used as alleged, and to exhibit and deliver up the stamps showing the payment of taxes.

The company claims the Secretary of the Treasury failed to prescribe any regulations under Section 61 of the tariff law, and that the Collector of the Internal Revenue refused and failed to permit the claimant to satisfy the Collector that its statements are true.

After the adjournment of Congress the Secretary announced that the lack of any funds practically nullified the law. The result will be awaited with great interest by everyone connected with the trade.

A CONDENSED DISPENSATORY OF NEW REMEDIES.

WITH a view to furnishing an entirely fair unbiased and thoroughly comprehensive summary of information concerning new and rare medicines we have prepared a guide which will be published in the columns of this Journal under the title of "A Condensed Dispensatory of New Remedies." The aim has been to make the work as condensed as it is possible to do without interfering with its practical utility. It is by its practical utility that it is to

be judged, being intended for the use of the dispensing druggist, not the analytical chemist. For this reason chemical formulas, melting points and other information of no immediate value to the dispenser has been omitted not that they are unimportant but merely that they have no immediate bearing on the dispenser's every day work.

We submit a portion of this Condensed Dispensatory to our readers herewith with a view to soliciting their suggestions and advice as to how to make the work of the greatest possible value to

them. We do this in hopes that the practical men of the profession will aid us by their suggestions to make this compilation absolutely unique in its value and indispensable to every pharmacist.

In this connection we would say to each of our readers:

We wish you to feel that this Journal is being published expressly for you.

If you see in it what you don't want, let us know.

If you don't see what you want, ask for it. If it suits you say so.

Specimen from the Condensed Dispensatory of New Remedies which will appear in the American Druggist.

- Abrin.** Brownish yellow powder, soluble in water. Fatal dose 1/10 gr. For producing artificial conjunctivitis in ophthalmology like the abrus pectoratus whence it is derived..... 5 gr. incl. each.
- Acetophenone.** (METHYLPHENYLKETONE, HYPOXONE.) Only colorless liquid, soluble in A. E. oils, slightly in water. Hypnotic, reduces blood pressure, slows respiration. Dose 1 to 5 min. in capsules. 1 oz. incl. 1.50
- Acetophenetidine.** See Phenacetine.
- Absinthin.** Brilliant, prismatic colorless, bitter crystals, soluble in A. C. E., slightly soluble in water. Digestive stimulant. Dose 1/2 to 2 grs. at meals. 15 gr. vial incl. each .75
- Acetal.** Etheral colorless liquid, of acrid, burning taste. Slightly soluble in water. Hypnotic depressant. Dose 1 to 3 ifj. 1 oz. incl. 1.00
- Acetylphenylhydrazin.** See Hydracetine.
- Acid agaric.** See agaricin.
- Anisic.** Colorless, prisma, soluble in A., insoluble in water. Antiseptic, antipyretic (wounds or acute rheumatism). Dose, sodium salt 15 grains. acid, 15 gr. vial. incl. each .25
- Camphoric.** Colorless, transparent bitter crystals or plates. Soluble in A. E., oils, hot water slightly in cold water. Anticatharrhal, antiseptic. (Nasal ulcers, etc.) In douche, spray or paint, 1/2 to 2 per cent solution. Antisudorific (night sweats). Dose 12 grains every 4 hours, or 30 grains at night. 1 oz. .55
- Cathartine.** Brown hygroscopic scales. Soluble water or dilute A. Laxative. Dose 4 to 6 grs. 1 oz. incl. .75
- Gynomnie.** Brown crystalline powder. Soluble in A., less so in water. Insoluble C. E., Emetic. Dose 4 to 6 grs. To disguise bitter tastes rinse the mouth with a 5 per cent. solution.
- Acid Cinnamic (CINNAMYLIC.)** White odorless crystals. Soluble in A., E., hot water. Insoluble in cold water. Antitubercular. Intravenous dose, 1 to 5 grs. in 5 per cent. oily emulsion, with 0.7 per cent. solution of na. cl. Locally in lupus, etc., in 5 per cent. emulsion or solution with cocaine. 1 oz. incl. 1.00
- Dithiosalicilic.** Powerful antiseptic. The salts only of the two isomeric acids are used. See sodium salts.
- Osmic (PER OSMIC, OSMIC ANHYDRIDE.)** Lustrous orange, hygroscopic needles of suffocating and penetrating odor. Antiseptic disiccant (when applied pure), antineuralgic (epilepsy, sciatic hypodermic injection, 7 to 15 minims of 1 per cent. solution several times daily. Dose, 1-50 gr. in pill three or four times daily. 15 gr. vial incl. each .95
- Phenylacetic.** (ALPHA-TOLUIC.) Lustrous crystals. Soluble in A., E., hot water. Less soluble in cold water. Antiseptic, antitubercular. (Phthisis, typhoid fever, etc.) Dose, 1 to 3 grs. three times daily in water..... 1 oz. incl. 1.50
- Salicyl-sulphuric Acid.** (SULFOSALICYLIC, SALICYLSULFONIC.) White crystals. Soluble W., A. Test for proteids, urine albumin, etc. 1 oz. incl. .75
- Sclerotic.** (SCLEROTINIC.) Dragendorff's. Faintly acid, hygroscopic powder, odorless, tasteless. Soluble in water. Difficultly in A. Substitute for ergot in epilepsy, inferior to E. in gynaecology. Dose, 1/4 to 5 grs. per day..... 1/4 oz. incl. 4 50
- Sulpho-salicylic.** See salicyl-sulphuric.
- Trichloracetic.** (CHLORACETIC.) Deliquescent, colorless crystals of faint odor, very caustic. Soluble in water, A., E. Powerful escharotic, pure. (Warts, naevi, corns, etc.) Astringent in nasal and laryngeal affections in 10 per cent. solutions. Test for urine albumin 1 oz. .40
- Adonidin.** Glucoside from Adonis vernalis. Yellow, very bitter, hygroscopic powder. Soluble in water, A., E. Cardiac tonic, regulating the heart beats in dyspnea, palpitation, etc. Dose, 1/2 to 1 gr. four times daily with ammonium carbonate and chloroform water. 5 gr. vial incl. gr. .50 15 gr. vial incl. gr. .75
- Agaricin.** (AGARIC, AGARICIN OR AGARICINIC ACID.) From white agaric, white microscopic scales, colorless, odorless, insipid. Soluble in A., hot water, slightly in E. and cold water. Almost insoluble in C. Antisudorific (in night sweats), 1/2 to 1 gr. in pill at night, or less hypodermically. 15 gr. vials incl., each .40
- Asceulin.** (POLYCHROME, BICOLORIN.) Lustrous white acicular crystals. Soluble in hot water, fluorescent. Substitute for quinine in remittent fever..... 15 gr. vial incl. .50
- Agathin.** (METHYLPHENYLHYDRAZINE SALICYLATE.) Small colorless or greenish scales, inodorous, tasteless. Soluble in A. E., Benz. Insoluble in water. Anterheumatic, anti-neuralgic. Dose, 2 to 8 grs. 2 or 3 times daily. 1 oz. vials incl. 3.50
- A'tyl tribromide.** (TRI BROMHYDRIN.) Colorless or slightly yellowish liquid. Soluble in E. Sedative, anodyne (hysteria, asthma, whooping cough, etc.) Dose, 5 drops 3 or 4 times daily. Infj. 2 to 4 drops dissolved in E..... 1 oz vials incl. 2.00
- Alphol.** (SALICYL-ALPHA NAPHTHOLATE.) Resembling Salod, which see.
- Aluminum aceto tartrate.** Faintly yellowish granules, with acid, astringent taste, soluble slowly in water. Astringent, disinfectant. (Nasal and laryngeal affections.) Apply in 1/2 to 2 per cent. solution, or as snuff, with 2 parts of boric acid..... 1 oz. .50
- Boreformicate.** Large, well-defined lustrous crystals, sweetish astringent taste. Soluble slowly in water. Astringent, disinfectant, used like aceto-tartrate, but is milder.
- Aluminum gallate,** also aluminum and ammonium gallate. See gallat.
- Alumel.** (ALUMINUM NAPHTHOL SULFONATE.) White or pinkish powder. Very soluble in water (blue fluorescence) and in glycerin, less so in A. Insoluble in E. Non-irritant, antiseptic. (Wounds, gonorrhea, etc.) 1/4 to 2 per cent. solutions. In Dermatology, 10, 50, or even 50 per cent. solutions. 1 oz. incl. .60
- Amido-antipyrine.** Resembles antipyrine, but more soluble.
- Amylene Hydrate.** (DIMETHYLETHYLCARBONOL, TETIARY AMYL ALCOHOL.) Limpid, colorless, hygroscopic liquid, with penetrating ethereal odor resembling camphor and peppermint. Soluble in A. E., C., 8 parts water. Anodyne, hypnotic. Dose, 45 to 60 minims. Whooping cough in children, 3 to 4 minims. 15 gr. vial incl. ea. 1.30
- Analgesin.** Synonym for antipyrin.
- Analen.** (ORTHOETHOXYANAMONOBENZ-OYLAMIDO CHINOLINE.) Colorless crystals.
- Anemonin.** From Anemone pulsatilla. Small, white, acicular, inodorous crystals. Soluble in A. E., sparingly in water. Anti-catharrhal, sedative (whooping cough, etc.) Emmenagogue. Toxic in large doses. Maximum daily dose 3 grs. 15 gr. vial incl. ea. 1.30
- Annidalin.** (DITHYMOL TRI-IODIDE, THYMOL IODIDE.) Reddish brown powder, decomposed by light. Soluble in E., slightly in A., insoluble in water. Antiseptic application similar to iodoform or aristol.
- Anthrabin.** (DESOXALIZARIN.) Phenol derivative, allied to crysophanic acid. Yellowish white powder, insoluble in water and dil. acids. Soluble in glycerin, in 5 parts A., and in alkaline media. Substitute for chrysarobin. Apply in 10 per cent. ointment or solution 1 oz. vial incl.

Written for the
American Druggist and Pharmaceutical Record.

HOME STUDY.

By FRANK EDEL,

Des Moines, Iowa.

Among the questions of importance to the pharmacist, that of education is easily first.

A class of pharmacists is springing up which seems to pay less and less attention to the scientific requirements of the profession, and which can boast of a still lesser acquaintance with the ordinary manipulations of the practical apothecary. The members of this new class seem to have no higher ambition than to act as purveyors and they sell the products of the labor of others without any idea as to their composition or value. They care nothing for pharmacy or pharmaceutical pursuits and have no interest in their advancement; and when they succeed financially they do more to discredit progressive educated pharmacy than all other causes combined.

PRELIMINARY EDUCATION NEEDED.

The boy who enters a pharmacy to "learn the business" should possess a sufficient preliminary education to appreciate and understand the teachings of text books. Without this the boy can never be a credit to himself or anybody else as a pharmacist. The idea that a young man lacking in the education necessary to understand the theories and problems likely to arise, and which are constantly coming up in the every-day work of pharmacy, can ever attain any position of credit to himself or the profession, is fallacious.

COLLEGE STUDENTS SHOULD HAVE PRACTICAL EXPERIENCE.

It is not the purpose of this article to decry colleges of pharmacy; this would be exactly opposite to the purpose for which it was written. Pharmacy is or should be a learned profession; and there is no question that the great majority of the schools are doing a good work.

The writer, however, laments the fact that the experience in a drug store, which formerly was insisted on by all colleges, is now more the exception than the rule. That a system of apprenticeship previous to the college course is very important cannot be denied. The store practice is of great importance to the student in many ways, the principal one being that it enables him to more fully understand the teachings of the schools, to appreciate the lectures and demonstrations, and to intelligently apply them to the practical workings of pharmacy. It is not my purpose to enter into any extended discussion of the subject. If, however, some of the professors who so actively advocate the policy of not requiring drug store experience will go out among clerks who have had the advantage of store training, see them at their daily work and compare them with graduates who have had no previous experience in the pharmacy before graduation, I think they too will be convinced that they have got the cart before the horse. It is true of course that there are exceptions, but it is the rule I am speaking of.

THE VALUE OF HOME STUDY.

While the advantages of a college education in pharmacy are fully appreciated by the writer—while it cannot be denied that study is more pleasant when directed by an experienced teacher in well equipped laboratories; and granting that it is much easier to understand the principles of chemistry when illustrated with

suitable apparatus by a skilled teacher—yet the idea that a man cannot become a scientific, well-posted pharmacist without attending a school of pharmacy is entirely wrong. The knowledge may have to be acquired with greater difficulty; it doubtless is more laborious, but with all that there is no information obtained in the schools that cannot be obtained by private study.

Dr. Harper, the president of the University of Chicago, said recently in a talk on University extension, that he believed that many scientific studies could be carried on by the use of the mails; eminent professors had advised Dr. Harper that chemistry could be so taught.

This from so able an authority sustains the position which in his humble way the writer has all along maintained. Look around you! Do you not know of many excellently posted pharmacists who have not had college training? Compare them with those who have; do they suffer by comparison? If the student wishes to make his college course the basis for future study, such a course is invaluable. If he thinks that he can learn all that is necessary about pharmacy in his college course, and that after study is not necessary, he is wasting both money and time. It is true that home study is not so pleasant as the directed course of the schools; but where properly conducted it is equally as satisfactory. The text books used in the schools are easily obtainable, and there is nothing taught in the schools that cannot be learned from these books.

THE DISPENSATORIES DISCOURAGING.

I was recently asked by a young friend to indicate for him a suitable home course of study in pharmacy. He wished to know what books he should purchase and what course of study he should pursue in order to accomplish the best results. He had been counselled by his employer to give his spare time to the study of the dispensatories and had endeavored to faithfully follow out his instructions. The results were not encouraging, however, as he found it impossible to make an orderly beginning or to follow a systematic course of study with their aid.

THE DISPENSATORIES ARE NOT TEXT BOOKS.

This leads me to say that the implicit confidence that pharmacists in general place in the dispensatories is hardly well placed. With many it is the only book of reference kept and it is of course the book they put their apprentice to studying. Now the dispensatories were no more intended for study purposes than is Webster's Unabridged Dictionary, or Appleton's Encyclopedia. They are purely and solely books of reference and should be so regarded.

SUGGESTIONS FOR STUDY.

The plan of study which in the writer's opinion is best adapted for general purposes along the lines previously indicated is that laid down in Coblenz's new "Handbook of Pharmacy." First become familiar with weights, measures and specific gravity, and then take up the preparation of galenicals, such as tinctures, fluid extracts, syrup, etc. The study of chemistry in its relation to pharmacy will naturally follow. As text books in this department Atfield's or Simon's chemistries are indispensable. The aim in this study should be directed toward attaining a good working knowledge of chemical facts. Where practicable the student should occupy himself with the preparation of some official salts, and follow this up by making tests to determine the purity of the specimen

made. The reactions involved should be carefully figured out from memory and afterwards corrected by reference to the text book. By observing this plan of study the student becomes familiar with chemical facts as he would in no other way. It is also serviceable to determine the chemical reactions and tests, first with pure chemicals and then with admixtures.

MATERIA MEDICA.

That the pharmacist should possess a good knowledge of *Materia Medica* it is freely conceded by all. In the study of this subject as in the study of Chemistry and Pharmacy, system is of first importance. The method carried out in Maisch's "*Organic Materia Medica*" is excellent in its way, but may be extended with advantage to suit the needs of the students we are addressing. Thus answers should be given to questions arranged as follows:

1. Pharmacopoeial name.
2. Botanical name and parts used.
3. Habitat.
4. Natural order.
5. Active principles and constituents.
6. Solvents.
7. U. S. P. preparations and strength and dose of each.
8. Medicinal properties.
9. Antidote, if toxic.

A specimen of the drug under study should be obtained and its appearance carefully noted. If similar in appearance to other drugs the different samples should be compared. If this course is pursued no difficulty should be experienced in acquiring a useful knowledge of *Materia Medica*.

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THE AFRICAN KOLA.

In compliance with a request made by the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD last August, the Department of State at Washington, sent out a circular letter instructing consular representatives and commercial agents of the United States stationed in countries where kola is grown to submit reports bearing upon the production, output, exports and prices of the article. The first report received is from Consul Pooley of the Colony of Sierra Leone and is given below as follows:

PRODUCTION AND OUTPUT.

The kola tree produces the nuts in pods containing three to eight nuts. When full, the pod changes from a green to a red brownish color, and if not picked in time, dehisces or falls to the ground.

The nuts when collected, are laid by for a few days, to allow the skin to soften, so as to admit an easy removal when washed. The nuts are exported in two ways, viz., fresh and dry.

To keep it fresh, care should be taken that the nuts are properly washed with clean fresh water, not a particle of the decayed skin being allowed to remain on them. After the water has drained, the quantity for shipment is put into a cane basket inlaid with a kind of broad leaf,* peculiarly adapted to keep the nuts fresh for a considerable length of time, say three months, and more; and to keep away worms, which are very destructive to the nuts. To export it in the dry state entails no trouble. After getting off the skin by washing, the nuts are split into pieces and dried in the sun; after which they are shipped in ordinary packages and so long as kept dry are not subject to deterioration.

* This leaf is understood to belong to the natural order of the Malvaceae and is known in the West Indies and South America by the name of "Bal leaf."—Ed.

The nuts (fresh) are sold in Freetown at from £3 to £6 per measure equal to a bushel and a half.

STATISTICS OF EXPORTATION.

The Kola nuts are principally exported to the following places, those exported from Sierra Leone in 1893 being as follows:

	cwt.	qrs.	lbs.	£	U. S. Money.
Gambia.....	5,518	2	7	24.130	\$117,416.58
Dakar.....	1,518		14	5,921	28,811.50
Gorée.....	694		2	3,551	14,865.63
Senegal.....	918		18	4,471	21,755.89
Windward Coast.....	291		2	1,164	5,664.42
Rufisque.....	221		24	896	4,359.94
Other places.....	147		2	468	2,277.28
Total.....	9,351		9	40,105	197,150.93
1 cwt. equals 112 lbs.					

PROPAGATION AND CULTIVATION.

The Kola nut is grown from the nut itself. It should be planted when the nut is fresh and not in the dried condition in which it is exported to European markets.

Raw Kola nuts should be planted in nursery beds, the same as coffee seeds,

and will begin to shoot in about five weeks and produce leaves in a week after. It grows with some rapidity, in its early stages, and in less than four months, if regularly watered, the plant will be fit for transplantation. Its growth after this is slower, according to the nature of the soil. The Kola likes a moist, but not damp, soil, and thrives best by the side of running brooks. Lands with a flat rock formation a few feet below the soil will not do, but a loose porous soil, with a great depth of earth and a clay or sand formation below, will do very well. With a liberal supply of manure, and water during the dry season, the Kola tree will come to maturity and bring forth fruit in five years. Where the conditions are less favorable the tree will bring fruit two or three years later.

The natives eat the nuts, in the early morning, as a stay against the wants of ordinary food while traveling, and in the evening to induce sleep. Altogether, they consider that a general benefit to the human system is derived from the consumption of Kola, say a single nut morning and evening.



Amylo carbol is a name given to a mixture of 9 parts of carbolic acid, 150 of soap, 160 of amylic alcohol, with water to 1,000.

Krepilium, according to the British and Colonial Druggist, is a fancy name for a tincture of Panama bark mixed with small quantities of aromatic oils.

For Inebriety.—Strophanthus is recommended for inebriety. It is given in seven-drop doses of the tincture, which give rise to vomiting and profuse diaphoresis, and quickly excites a distaste for alcohol, even after the withdrawal of the drug.

Salubrine is a patented remedy hailing from Switzerland. Its composition appears to be; acetic acid, 2 per cent.; acetic ether, 25 per cent.; alcohol, 50 per cent.; water, 23 per cent. It possesses a strong antiseptic and hæmostatic action, and is of use in the dressing of wounds, bruises, etc.

Benzacetine, or acetamido-methyl-salicylic acid, is a white crystalline body, melting at 205°C. It is soluble in alcohol, slightly so in water. It forms very active salts with bases. It is said to be an excellent remedy for neuralgia, and to give great relief in half an hour. A number of clinical experiments on it are being recorded.

Paraform.—According to Aronsohn (Jour. Phar. Elsass. Lothringen), when formaldehyde is heated for a sufficient length of time in a watery solution, it passes into a solid, white crystalline polymer, insoluble in water. This is paraform. It is a very strong intestinal antiseptic. For this purpose it is said to be superior to B-naphtol, iodoform, salol, dermatol and benzonaphtol. It has a strong inhibitory action on the propagation of bacilli. One grain of para-

form will completely sterilize 200 grammes of urine. — B. & C. D.

Pomade to Cure Baldness.—Leistikow's method of curing baldness (Allg. med. Entre-Ztug and Nouv. Remed.) consists of the application of a 5 or 10 per cent. ointment of chrysarobin. But he most frequently has recourse to a pencil or cosmetic ointment made as follows:

	Grammes.
Chrysarobin.....	30
Resin.....	5
Yellow wax.....	35
Olive oil.....	30

The dermatitis sometimes caused by chrysarobin is relieved by the application of lead cerate.

Sublimophenol.—Sublimophenol is the name given to a chlorinated phenate (carbolate) of mercury, or, better, to a mixed chloride and phenate of mercury, obtained by gently heating an aqueous solution of equal molecules of potassium phenate and of mercury bichloride. A brick-red precipitate forms, turning successively yellow and white. This is properly washed, dried in the air, and then treated with boiling alcohol. On cooling, this alcoholic fluid deposits colorless crystals, melting with decomposition at about 210°C. (410°F.). They are very soluble in melted phenol and in a boiling aqueous or alcoholic solution of phenol.

Boral and Cutol.—Boral is described (Apoth. Zig., 1894; IX; p. 763) as being aluminum borotartrate, and cutol as aluminum borotannate. The former is soluble in water, the latter not. Both preparations are said to be therapeutically applicable as disinfecting astringents, particularly in dermatology. Cutol, it is reported, has

proved serviceable in cases of facial erysipelas. It may be rendered soluble in water by the addition of tartaric acid; and in this soluble form it has been successfully employed in acute gonorrhœa, it is stated.

Cutol contains 76 per cent. tannin, 18.23 per cent. aluminum and 10.71 per cent. boric acid.—Am. M. S. Bulletin.

The Use of Ether as an Intoxicant, says the Lyon Medical, which originally came from England, has existed in France for the last five or six years. The number of persons addicted to this form of debauchery seems to be growing greater.

Women Pharmacists in Belgium.—The organ of the Brussels Pharmaceutical Society publishes an interesting article on pharmacy and ladies, while discussing the pros and cons of the independence of women. (British and Colonial Druggist). The only argument against women coming to the front in public positions, they say, is, that by being kept back they are driven to seek the support of a husband, thus promoting marriages. They say, with the author of Petit Faust, "if you can't embrace a husband, why, embrace a career." The philosophical reflections indulged in are the outcome of an interview by Champal, the Napoleon of interviewers, with the lady pharmacists, "Our sisters by Eve, and our brothers by pestle and mortar."

Cadmium Salicylate.—According to Dr P. Cesaris (Rep. de. Pharm., A. M. S. J.) cadmium salicylate may be prepared by the action of salicylic acid; in hot aqueous solution, upon freshly precipitated cadmium hydroxide, or upon cadmium carbonate; or by the interaction of barium salicylate and cadmium sulphate. The salt is easiest and best prepared by one of the two first named procedures. As the filtered fluids cool, the greater portion of the salicylate separates out. During the evaporation of the mother liquors, the temperature should not be allowed to rise beyond 60°C. (140°F.). The salt is purified by re-crystallization from hot water. Cadmium salicylate has the formula (C₆H₄OHCOO)₂Cd, and contains 29 per cent. metallic cadmium. It is said to possess a more energetic antiseptic action than the other cadmium salts, and to give good results as an astringent antiseptic in the treatment of purulent ophthalmia, vascular engorgement of conjunctivitis, thickening of the cornea, etc.

The Sale of Medicines by Doctors in France.—It is a somewhat sore point with French pharmacists that medical men who sell drugs, etc., are exempted from certain clauses of the Pharmacy Acts relating to Patents. Their discontent has not been diminished by an article in the Concours Medical, by a Dr. Aury, one of the doctors who sells medicines. He cries out loudly against the "audacity" of the legislators who compel doctors to be submitted to the same regulations as pharmacists, when they sell drugs—that is, says the Repertoire de Pharmacie, "when they turn pharmacists." Dr. Aury sells medicines himself, but objects to keeping a register of poisons, a special cupboard for poisons, to having his weights and measures verified, and to be troubled with the visits of the inspectors. Dr. Aury, however, has rather put his foot in it, and his critics bring forward cases of medical men who had neglected to observe these precautions, and had thereby made fatal mistakes. After severely criticising the doctor, they advise him to consider with sang-froid those points which he appears to have discussed ab irato in the Concours Medical.—B. & C. D.

Society of Chemical Industry.

NEW YORK SECTION.

A meeting of this Section was held at the College of Pharmacy, West 68th street, on Monday, Dec. 3, at 8:30 p. m., Alfred H. Mason, F. C. S., in the chair. After the minutes of the last meeting had been read and confirmed, the chairman said that at the last meeting a committee under the chairmanship of J. Hartford had been appointed to consider the question of the use of tax-free alcohol in chemical manufactures. He wished to point out that this was a matter entirely outside the scope of their regular proceedings, and that they could only take it up in an unofficial manner. This, however, they were doing, but he understood from Mr. Hartford that they had not made sufficient progress yet to make any report to the meeting. The chairman further stated that letters had been sent out to all the members of the Society in the locality, inviting them to join this Section, and that 110 had signified their willingness to do so, amongst them being the President of the American Chemical Society.

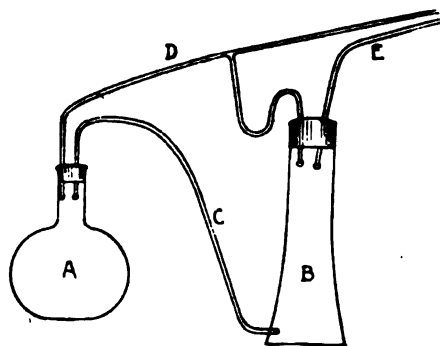
The reading of papers was then proceeded with. The first, in the author's absence, was read by the Secretary, Dr. Schweitzer, and was on

An Apparatus for Extraction.

BY CHAS. E. PARKER.

The apparatus is designed more especially for pharmaceutical purposes, in particular for extracting alkaloids, etc., from drugs prior to shaking out and estimating in the usual way. For this purpose it works well, being automatic and continuous, and requiring but little attention.

The method of working is at once evident from the figure. The solvent is placed in A and the marc in B, the two tubes E and D passing into an inverted condenser. When the solvent is heated it volatilizes and passes into D, where it is condensed and passed into the vessel B containing the marc, through which it slowly percolates. Be-



PARKER'S EXTRACTION APPARATUS.

fore starting, however, sufficient liquid must be placed in B to cover the metal of the tube C, through which the saturated solvent is siphoned back to the flask A. The process is continued till the marc is exhausted, when the solution is removed from A and the alkaloids, etc., shaken out in the usual way.

The next communication was on

Modern Perfumery.

BY DR. WM. UNGERER.

The art of perfumery, remarked the author, was undergoing a complete revolution and the tendency in this branch was toward the abolition of oils and essences in the manufacture of perfumes, and the substitution for them of synthetic products

prepared in the laboratory of the chemist. These latter had considerable advantages, they were colorless, crystalline bodies which kept well, were easily stored, cheap and fairly soluble in alcoholic liquids.

The attention of the audience was directed to four synthetic products of what the author called modern origin, Heliotropin a very valuable and highly prized product, by the aid of which they were enabled to fix the perfume of the heliotrope which could only previously be obtained by blending various essences, the plant declining to give up its odor either to fats or solvents. This body was prepared from camphor oil and the process was described by the author as a trade secret and one into which he could not enter, as it was so very complicated.

Artificial musk prepared from toluene next claimed attention, but was speedily dismissed, the author remarking that as a musk perfume it was a failure but it might have uses in other directions. Artificial vanillin from coniferine had also largely displaced the natural product, with which it was in every respect absolutely identical.

Terpinol was now being used for the preparation of the perfume of the violet, a process having been recently discovered by which this might be done and doubtless there was a large future before it.

Improved methods in the distillation of essential oils had largely contributed to the excellence of modern perfumes. The clear almost colorless liquids in the druggists' oil bottles to day were in marked contrast with the dark, thick substances formerly seen in them, and this was due in almost every case to careful redistillation, whereby a large percentage of the dark resinous matter was got rid of.

The author then went on to refer to the enfleurage process, as carried out in Grasse for the preparation of floral pomades, and said that it was rather remarkable that no improvement had been made in this process for the last 100 years. Other fats, such as petroleum, and solvents as carb. n. di-sulphide, ether and chloroform had been tried, but all had proved either useless or inferior to that now in use. The process had been tried in America, but had not proved a success, probably owing to climatic conditions. The author concluded his paper with a reference to the time when the oil and the essence will learn the art of blending themselves into perfumes no more, and the chemist with his laboratory will occupy the position where once reigned alone the flowers from which we derive our perfumes to-day.

In the discussion which followed, Dr. H. Schweitzer said that the preparation of heliotropin or piperonal was not a trade secret, which the author supposed it to be. The process was a very simple one and could be found in detail in the *Berichte de Chem. Gees*. Eyckmann had shown that heavy oil of camphor contained an oxygenated body similar to that found in oil of saesafra, namely, safrol. This substance, on treatment with alcoholic potash or soda underwent molecular rearrangement and saesafrol resulted, which latter, on oxidation with bichromate and sulphuric acid, yielded heliotropin or piperonal, which was readily isolated and purified by steam distillation.

The Chairman concluded the discussion by remarking that in 1876, at a meeting of the Liverpool Chemical Society, he had called attention to these very products which Dr. Ungerer now described as products of modern industry.

The last communication was from the secretary, on

A New Reaction for the Detection of Soap in Lubricants.

BY DR. H. SCHWEITZER

The author said that the presence of soap in lubricating oils must generally be looked on as an adulterant, added for the purpose of increasing the viscosity of the oils, one of the chief adulterants being aluminum soap, which was added especially to mineral oils which otherwise would be almost unfit for use.

The reaction for the detection of soap depended on the solubility of metaphosphoric acid in absolute alcohol or ether, the alkali and alkaline earth salts being insoluble. Ammonium metaphosphate was soluble in alcohol but that fact might be neglected owing to the fact that rarely are ammonium soaps met with. In doubtful cases special tests could be made for ammonia afterwards. If then the lubricating oil be dissolved in benzole and treated with a saturated solution of metaphosphoric acid in absolute alcohol, the calcium potassium and sodium salts present in the soaps will be at once precipitated. When benzole is used as the solvent it must be remembered that ozokerite and certain waxes were precipitated on the addition of alcohol and in that case ether must be used both to dissolve the oil and the reagent.

The acid reagent did not affect any of the common vegetable, mineral or animal fats or oils unless a soap were present, when precipitation would at once occur.

In the ensuing discussion several members attacked the doctor's statement that soap was an adulterant and endeavored to show its advantages in lubricants, but in reply Dr. Schweitzer upheld his position, saying that when soap was added the lubricant could not be used when moisture or steam was present, as these precipitated the soap, and further in cold weather the soap was apt to gelatinize and render the lubricant quite useless. Again lubricants containing soap considerably increased the friction between bearings, in some cases to a very great extent, and as a natural consequence the temperature of bearings lubricated with a soapy substance was considerably higher than those which were lubricated with oil alone. In looms the increase of temperature had been found to be as much as 20°C. which was too high to enable the lubricant to be used with safety.

This terminated the regular business, but before adjourning the chairman announced that if the members were agreeable unofficial arrangements would be made by Mr. Hartford whereby the members might dine together on evenings prior to the meetings. This was unanimously agreed to by those present, and the meeting terminated.

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The Antitoxin Treatment of Diphtheria.

Kossel, of Koch's Institute (Deut. med. Woch., October 25th, 1894) remarks that the diphtheria bacillus belongs to the eminently toxic bacteria. The diphtheria poison is obtained by inoculating bouillon-containing flasks with diphtheria culture, and in three weeks' time killing the micro-organisms by adding 0.5 per cent. phenol, or 0.3 per cent. tricresol. The clear fluid which separates out contains the diphtheria poison.

Behring and Ehrlich call normal serum such a serum that 0.1 Cc. will suffice to render inert ten times the fatal dose of the diphtheria poison, thus 1 Cc. of the normal serum contains 1 immunity unit. Therefore a serum of which 0.01 suffices,

represents 10 times the normal serum; 500 such immunity units are necessary to cure a child with diphtheria. The clinical picture of diphtheria varies greatly, so that the diagnosis should be made by bacteriological examination. If the process has extended to the bronchi and lungs, the serum treatment is too late. When complications, including secondary infections are present, the antitoxin cannot cure with certainty, and if the poison has long been present in the body the prognosis is also doubtful.

Yet the most desperate cases should be treated, as the antitoxin cannot do harm. The mortality in Koch's Institute has permanently fallen to 16 per cent. Children treated on the first and second days have never died. Every fresh case of true diphtheria can undoubtedly be cured by a sufficient quantity of the antitoxin.

Under the treatment the membrane loosens and the improvement on the general condition is marked. In fresh cases thus treated there is little fear of subsequent paralysis, and the author has never seen extension of a hitherto intact larynx. Meister Lucius and Bruning have taken over the manufacture of this antitoxin under the direction of Behring and Ehrlich. They supply flasks containing respectively 600, 1,000, and 1,500 to 1,600 immunity units. For protection against diphtheria a quarter of flask No. 1 is only needed, but the author would not trust to such immunity lasting over two or three weeks.—W. Koerte (Deut. med. Woch., November 8th) reports on a series of cases of diphtheria treated with Behring's serum, in the Urban hospital of Berlin, between January 20th and October 27th of the present year. The total number of children treated was 132. The average results during the period from June, 1890, to December 31st, 1893, showed 54.9 per cent. of cures and 45.1 per cent. of deaths. Thus the serum treatment had diminished the mortality by 12 per cent. Besides the 121 cases referred to, 106 cases had been treated without serum during a period when none was procurable, with 46.2 per cent. of recoveries and 53.8 per cent. of deaths. The mortality in the same epidemic was, therefore, 20.7 per cent. higher in cases not treated with serum than in those treated with it. The results of injections made after the third day were less favorable. The larger the initial doses the better the results. No injurious effects were noticed; urticaria occurred only in nine cases. No influence on the temperature or on the local foci of the disease was observed in severe or moderately severe cases; on the other hand, a markedly favorable effect on the general condition was often seen in severe cases. The experiments, so far, are, in Koerte's opinion, favorable.

More extensive clinical observations, especially in cases treated early, are, however, necessary to determine the value of the remedy. It must be tested in a large number of severe cases in different epidemics and in different places.—Damiano (Rif. Med., October 30th) reports a case of diphtheria in Massel's clinic at Naples, which was successfully treated with antitoxin. Damiano also records (ibid., November 3d) a case of laryngeal diphtheria in a girl, aged 5, in whom, urgent dyspnea having come on suddenly, intubation was performed by Massel. Immediately after an injection of 8 Cc. of Behring's serum No. 1 was given. Forty-three hours after the intubation the child's

breathing was so easy that the tube was dispensed with. Rapid recovery took place. The bacteriological examination in this case does not appear to have been conclusive, but clinically the case was one of diphtheria. And there could be no doubt as to the very favorable effect of the serum on the after-course of the disease after intubation.

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Ink Crystals.

The pictorial representations of the forms taken by ice-crystals are familiar to everyone; and many young observers have been grievously disappointed with the difference between nature's handiwork and artistic fancy, as exemplified by the ice-crystals really seen and those which embellish scientific works. These "ice-flowers," as Tyndall called them, cannot always be conveniently produced, so a substitute for them, in the form of "ink-flowers," should be interesting to students of crystallography. Dr. E. Trouessart describes in *La Nature* how "fleurs de l'encre" can be procured, and the accompanying illustration which *London Nature* prints reproduces some of the



INK CRYSTALS.

forms observed by him. The method employed is very simple. A drop of ink is allowed to dry on a slip of glass, and observed under a microscope with powers of 50, 100, or 200 diameters. The inks of commerce vary somewhat in composition, hence the facility with which certain crystalline forms are obtained differs. All inks, however, having a base of solution of gall-nuts and sulphate of iron, give analogous results.

Dr. Trouessart hesitates to express an opinion as to the nature of the salt which crystallizes in the forms illustrated. The crystals chiefly belong to the cubical system, and this suggests that they are magnetic oxide of iron. On the other hand, their white color, and the peculiar shapes of some of the groups of crystals, indicate that iron disulphide or marcasite is the substance in question. Perhaps some worker in chemical crystallography will determine the point.

Antidotes to Poisons.*

"What to Do in Cases of Poisoning" is a useful little book for those who wish to go more fully into this subject, which we can only treat briefly. The book is written by Dr. William Murrell, and is published by H. K. Lewis. It describes the symptoms, chances of recovery, and what to do—in short, it is a ready aid to medical men. What we purpose here is to put before chemists and druggists some hints as to what they may do should they be asked to treat a case of poisoning.

The very first thing they should do is to send for a medical man. If they do not know what the poison is, the necessity for a medical man's presence is all the greater. Chemists are not expected to judge from symptoms, and it is risky for them to try.

The second point is to get the stomach emptied as quickly as possible, but this must not be done with the stomach-pump when corrosive acids and caustic alkalies are the poisons, because perforation of the stomach might follow; nor should emetics be used in these cases. The stomach-pump may profitably be used in other cases, especially if the poison is an irritant; but it is, on the whole, more expeditions to inject subcutaneously 5 minims of inject. apomorph. hypoderm. the victim swallowing a cupful of water, with the chill off, at the same time, but this is not obligatory. If the injection cannot be given, 80 grs. of powdered ipecac. and 15 grs. of sulphate of zinc in a cupful of tepid water make a prompt emetic. So also does a tablespoonful of mustard-flour in water.

A stomach-pump is made of a glass funnel and a soft thick-walled rubber tube about 6 feet long. To one end of this a large-sized glass funnel is firmly fixed. The other end is dipped in glycerine, and the patient is directed to swallow it. When the swallowing has commenced a little gentle pressure passes the tube on to the stomach, which it will have reached when rather less than half its length has disappeared. Some warm water is then poured into the funnel, and while it is yet full it is quickly depressed into a basin. The tube being now filled with water, and the funnel end being lower than the stomach end, a syphon action is established, and the stomach is rapidly and easily emptied. When the flow has ceased a pint or two of warm water ought to be poured into the stomach and likewise evacuated, and this should be repeated as long as is necessary.



Diagram to show—(a) The position of the tube when emptying the stomach; (b) when filling the stomach; (c) the opening of the larynx, past which the tube is carried by swallowing. When the patient cannot be induced to swallow, then the mouth must be opened, and the point of the tube, as it is passed, must be pressed backwards against the posterior wall of the pharynx (d).

Acetanilid, or Antifebrin, sometimes causes alarming symptoms, especially in doses above 8 gr. Treatment—Induce vomiting, keep the patient warm in bed, give a teaspoonful of sal volatile (but no other alcohol), and, if there are indications of collapse, subcutaneous injections of ether and caffeine. Four hours after the dose has been taken brandy may be given in teaspoonful doses well diluted with water.

* *The Chemists' & Druggists' Diary.*

Acid, Acetic.—The glacial acid is most dangerous, as it causes corrosion of the oesophagus and stomach. This is the trouble with all corrosive acids and alkalies: they practically destroy the mucous membrane with which they come into contact, and make the tissues so tender that the employment of violent measures for relief, such as vomiting, or even the administration of carbonates, is in itself dangerous. Neutralization of the acid is the first thing to effect, and for this purpose a mixture of soft soap 1 part, with water 10 parts, is effectual. So also saccharated solution of lime, calcined magnesia, chalk, or bicarbonate of soda with water, followed by olive oil or not too warm gruel. Give also a dose of morphine.

Acid, Carbolic.—While getting the stomach-pump ready let the patient drink olive oil or cod-liver oil freely, or give the whites of half-a-dozen eggs. Wash out the stomach with a solution of 4 oz. of Epsom or Glauber's salts in a quart of tepid water, until the washings cease to smell of the acid. Then give an ounce or two of olive oil, and sustain the patient with brandy or sal volatile.

Acid, Hydrochloric.—Give soap and water, and otherwise treat as described under Acid, Acetic.

Acid, Hydrocyanic.—Death ensues so quickly that it seldom happens that antidotes are possible. In any case action must be prompt. Give the patient (1) stimulants (whisky, etc.), (2) an emetic (not apomorphine), and (3) the chemical antidote. One cannot be wrong in putting the patient's head under the cold water tap, or giving him the ammonia-bottle to sniff, while making the chemical antidotes—a mixture of liquor ferri perchlor. oz. j., liq. ammon. dram. ij., and water oz. v.

Acid, Nitric.—Treatment as for glacial acetic acid, with liberal use of oil.

Acid, Oxalic.—Give saccharated solution of lime, 2 oz. or more diluted, or 2 oz. of prepared chalk made into milk with water. Then use the stomach pump, washing the stomach well, and dose with soap and water, followed by 1 oz. of castor oil. Emetics generally fail to act.

Acid, Sulphuric.—Soap and water or any alkali that is handy. Prompt action is imperative. Avoid the stomach pump and vomiting. After free administration of alkalies give olive oil and demulcent drinks and a hypodermic injection of morphine to allay shock.

Aconite.—The liniment is sometimes taken in error, either alone or with belladonna. In any case empty the stomach by the pump. Emetics are much too slow. Then put the patient in bed, with hot-water bottles at the feet and chest, and give hot gin-and-water, whisky, brandy, or sal volatile.

Alcohol.—When excessive drinking has brought on symptoms of poisoning, get the victim's stomach emptied by emetic or pump, always washing out thoroughly besides merely emptying, then do all that is possible to keep him awake and active, first by a 2 oz. dose of liq. ammon. acet., then cold douches, preferably on head and neck, and strong coffee.

Ammonia.—Give dilute acetic acid or lime juice freely, and follow it with 1 oz. of olive oil and gruel drinks.

Antipyrin.—Symptoms of poisoning such as are mentioned under Acetanilide have been met with. Give the patient teaspoonful doses of equal parts of sal volatile and spirit of ether.

Arsenic.—Emetic or stomach-pump, and meanwhile mix 8 oz. of liq. ferri perchlor. fort. with about 1 gallon of water, and add to it a solution of 1 lb. of washing soda in $\frac{1}{2}$ gallon of hot water; quickly strain through a towel, and give the precipitate ad lib. mixed with water. Or, instead of this, give dialysed iron—say, 4 oz., followed by $\frac{1}{2}$ oz. of common salt in water. Calcined magnesia is also good, but let the patient first take 1 oz. of tr. ferri perchlor. and dram. ij. mag. calc. in 1 pint of water. Gruel or white of egg should follow, and stimulants freely.

Atropine, or Belladonna.—Emetic or stomach-pump if the poison has been taken within six hours. Otherwise give $\frac{1}{4}$ gr. of morphia hypodermically, and infusion or tincture of jaborandi by the mouth. This should be followed up by stimulants and hourly hypodermic injections of morphine ($\frac{1}{4}$ gr.) or pilocarpine ($\frac{1}{4}$ gr.)

Camphor.—Some people take Rubini's tincture too freely, and deaths have resulted. Empty the stomach and give stimulants, keeping the patient warm.

Cantharides.—Not a common poison. Produce vomiting by apomorphine, or wash out the stomach with the pump; then give this draught: Ol. ricini dram. vj., spt. ammon. arom. dram. j., tr. opii dram. ss., aq. menth. pip. oz. j. Follow this up with barley-water or gruel.

Caustic Potash or Soda.—Dilute acetic acid, and otherwise as directed under Ammonia.

Chloral Hydrate.—Emetic (apomorphine preferably) or stomach-pump; then strychnine ($\frac{1}{4}$ -gr. doses), hypodermically or by stomach, and keep the patient in bed, with blankets heaped up. Also give nitrite-of-amyl inhalation (5 minims) occasionally, and do all that is possible to keep the patient awake.

Corrosive Sublimate.—Raw white of eggs—a dozen or more—before and after emetic or stomach-pump.

Creosote.—Emetic (apomorphine) or stomach-pump, followed by olive oil (4 oz.), gruel, and a liberal dose of morphia.

Lead, Sugar of, Etc.—Emetic or stomach-pump, with warm solution of Epsom or Glauber's salts; then barley water, soured with acid. sulphuric. arom. Purge with the castor oil draught mentioned under Cantharides.

Morphia and Opium.—Empty the stomach by pump, and do all that is possible to keep the patient awake by walking, pinching, cold-water cloths, etc. Give atropine ($\frac{1}{8}$ gr.) hypodermically and strong coffee to drink, also ammonia to inhale.

Nitre.—Emetic, and gruel or other demulcent drinks.

Nux Vomica and Strychnine.—After the stomach has been emptied (apomorphine is best for this), give a liberal dose of chloral hydrate—say, scruple. ij. with potass. brom. dram. ij. to an adult—and should a tetanic convulsion come on give chloroform by inhalation. Repeat the bromide (dram. j.) every half-hour, and keep up the chloroform inhalations.

Paraffin Oil and other Petroleum Products.—Empty the stomach, and give spt. ammon. arom. dram. ss. and spt. ætheris dram. ss. every hour, with a teaspoonful of brandy occasionally. Keep the patient warm.

Tobacco.—Empty the stomach, give liq. strychnine hydrochlor. "x. and stimulants freely.

Vermin-Killers.—The treatment should be for arsenic and strychnine. Empty the stomach; then give dialysed iron oz. ij., fol-

lowed by potass. bromid. oz. ss. in a cupful of water, chloroform inhalations, and gruel freely.

Weed-Killer.—As for arsenic poisoning, but after the stomach has been emptied give liq. ferri perchlor. oz. j. in a pint of tepid water, followed by 1 drachm of calcined magnesia.

White Precipitate.—Treat as for corrosive sublimate, but first wash the stomach well out with two quarts of water (96° Fahr.) containing the whites of three or four eggs.

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The Treatment of Baldness.

The best promotive of hair growth is general vigor, which, prevailing where hair should be as well as in the rest of the body, stimulates its development along with that of other functions.

For baldness, hair lotions containing cantharides, attracting an increased blood supply to the part, may be useful when the affection is caused by mere sluggishness of the cutaneous circulation; but it fails to reach the cause of disease where the hair is lost through seborrhœa. Such cases are benefited by remedies which kill microbes, such as sulphur, mercurial applications, and anti-septic drugs. The effect of the microbe on the greasy and dry scales in seborrhœa which causes proliferation of the epithelium is such as to lead to atrophy of the hair, and if the disease is not arrested, atrophy of the whole follicle, and consequent permanent alopecia.

Where the damage to nutrition is not so great, the hair is without lustre and turns more or less gray, and then the hair restorers which color the hair from without and not from within are resorted to. Sulphur and acetate of lead are often ingredients of these applications, and perchloride of mercury is too frequently the leading constituent of many vaunted remedies. It is doubtless of much value as a destroyer of microbes when used in suitable cases, but when applied indiscriminately for long periods is in danger of producing injurious effects.

Pilocarpine hypodermically injected, or given internally as tincture of jaborandi, is of value as a promoter of growth of hair, but is too powerful a remedy for indiscriminate use, besides inducing copious perspirations and depression of the heart.

Less direct means may be found in tonics of iron, strychnine, quinine, etc.; but more powerful are cod-liver oil and change of air, generally to a bracing climate. Baldness is, however, a symptom of such diverse conditions that there is no routine treatment for it, but the cause should be carefully sought out and intelligently dealt with.

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The 'Graph Patent.*

Few patents have given chemists and druggists and stationers so much trouble as the one familiarly known as the 'Graph patent. The 'graph is such a familiar object, and the process of making it so simple, that people came to think it was common property, the consequence being that many not only made the composition but private use, but put it up in quantities for sale. Then it was that a military-looking gentleman would call, and convince the innocent retailer that letters patent covered the 'graph, whereupon compensation varying from 10l. to 100l. was demanded. This has been going on

* The Chemist and Druggist.

for a dozen years, and we have never heard of any retailer who had the courage to dispute the Colonel's claims. We are glad to inform the trade that they can now breathe graphically with freedom. The patent expired on Tuesday last. It was granted on November 13, 1878, to Kwaysser and Husak, through their English agent, Mr. J. G. Wilson, of Manchester and London, for a glycerin and gelatin composition, and inks made according to the subjoined formulæ:

THE COPYING PAD.

Gelatin.....	1 part
Glycerin.....	4 parts
Water.....	2 parts

All the ingredients to be weighed and a solution made from them secundum artem.

THE INKS.

(i) Methyl violet.....	1 part
Water.....	7 parts
Alcohol.....	1 part
(2) Rosaniline.....	2 parts
Water.....	10 parts
Alcohol.....	1 part

In each case dissolve the solid in the mixed liquids, taken by weight.

While the applicant for a patent covering this invention was pending other provisional specifications for similar devices were lodged at the patent office. Thus an Astor KISSAM made a pad consisting of:

Grammes.

Leipic printer's roller-composition (hard).....	145
(soft).....	380
Glycerin.....	250
Zinc white.....	30-5
Alcohol.....	20
Mirbane oil.....	2

An aniline ink was to be used with this, but provisional protection only was granted, and the patent given to the prior deposit. A composition of Mr. P. G. Rosefeld's, substantially of the same nature, suffered a similar fate, but Mr. J. W. Parkin succeeded in getting a patent (No. 2,864, July 14, 1879) for paper or calico coated with a mixture of glycerin (six parts) and glue (one part). This production has been sold as "hectograph sheets," and as far as we are aware the patent is still in force. At present, therefore, what chemists may do is to make and retail the composition according to Kwaysser and Husak's patent.

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Treatment of Burns of the First Degree.

Selected Formulæ.

I.

Salicylic acid.....	gr. viiss
Zinc oxide.....	3 iiss
Powdered starch.....	3 x

Sig.—Dusting powder.

II.

Boric acid.....	Grammes.
Zinc oxide.....	5
Benzoated lard.....	10
Sig.—Ointment.	35

III.

Solution of aluminum acetate.....	Grammes.
Benzoated lard.....	50
Adeps lanæ "N. W. K.".....	20
Sig.—Cooling ointment.	30

IV.

Lime water.....	3 i
Linseed oil.....	3 vi
Sig.—For a compress.	3 iiss

V.

Aristol.....	3 i
Olive oil.....	3 vi
Dissolve and add	
Petrolatum.....	3 iiss
Adeps lanæ "N. W. K.".....	3 iiss
Sig.—Ointment.	

Profitable Preparations.*

By WM. B. PARKER,

Birmingham, Ala.

JONES'S ELIXIR IRON, MERCURY AND ARSENIC

CHLORIDES.

Reduced Iron.....	40 grs.
Mercuric chlorides.....	4 grs.
Hydrochloric acid.....	a sufficient quantity.
Solution of arsenious acid.....	40 min.
Water.....	1 fl. oz.
Compound elixir of quinine (N. F.).....	enough to make ½ gal.

Dissolve the iron in the water, with the aid of heat and a little hydrochloric acid; then add the other ingredients, and filter.

JONES'S ELIXIR IRON, QUININE AND

STRYCHNINE.

Quinine sulphate.....	64 grs.
Strychnine sulphate.....	1 gr.
Citric Acid.....	5 grs.
Alcohol.....	3 fl. ozs.
Iron pyrophosphate.....	250 grs.
Syrup.....	6 fl. ozs.
Spirit of orange.....	80 min.
Distilled water.....	7 fl. ozs.
Ammonia water.....	a sufficiency.

Triturate the first three ingredients till minutely divided, then add the alcohol and spirit of orange. Heat the syrup to 150° F., and add it to the mixture. Dissolve the iron in the water and add it to the other fluid. Finally, neutralize with water of ammonia.

JONES'S ELIXIR OF PARALDEHYD.

Paraldehyd.....	8 fl. ozs.
Alcohol.....	10 fl. ozs.
Syrup.....	10 fl. ozs.
Orange flower water.....	4 fl. ozs.
Water.....	enough to make 2 pints.
Caramel.....	to color.

JONES'S COMPOUND RHUBARB MIXTURE.

Pale cinchona.....	3¼ oz.
Rhubarb.....	3¼ ozs.
Orange peel.....	3¼ ozs.
Sodium bicarbonate.....	32 ozs.
Powdered aloes.....	1½ ozs.
Jamaica ginger.....	7 drs.
Extract of hyoscyamus.....	4 drs.
Alcohol.....	16 fl. oz.
Distilled water.....	70 fl. oz.

Reduce the drugs to a coarse powder. Mix the alcohol and water, and dampen the drugs with 8 fluid ounces of the menstruum. Let stand 24 hours in a closed vessel; pack tightly in a percolator, and pour menstruum upon it till five pints are obtained, adding water if necessary to complete the amount.

JONES'S TOOTH-ACHE DROPS.

Creosote.....	2 fl. ozs.
Chloroform.....	2 fl. ozs.
Wine opium.....	4 fl. ozs.
Tincture of benzoin.....	1 fl. ozs.

JONES'S ASTHMA-POWDER.

Powdered stramonium-leaves.....	30 parts.
Powdered belladonna-leaves.....	30 "
Powdered saltpetre.....	5 "
Powdered opium.....	2 "

To be burned and inhaled.

JONES'S GLYCERIN-JELLY.

Spermace'i.....	2 oz.
White wax.....	1 oz.
Oil of Sweet Almonds.....	4 fl. oz.
Glycerin.....	3 fl. oz.
Powdered tragacanth.....	¼ dram.
Rose water.....	6 fl. oz.

Dissolve the tragacanth in the glycerin, with gentle heat; dissolve the glycerin in the rose water; liquefy the other ingredients by heat, and add to the glycerinic solution; emulsify with an egg-beater until nearly cold.

*Merck's Market Report

JONES'S SEA-FOAM.

Alcohol.....	8 fl. ozs.
Waste.....	8 fl. ozs.
Castile soap.....	2 ozs.
Potassium carbonate.....	¼ oz.
Oil of lavender.....	20 min.
Tincture of soap bark.....	2 fl. ozs.

Macerate the soap with the water in which the potassium carbonate has been dissolved; agitate the mixture, then add the alcohol and soap bark tincture in which has been dissolved the oil; finally filter.

JONES'S ROSE LIP SALVE.

Paraffin.....	Parts.
Cacao butter.....	400
Petrolatum.....	500
Resin.....	1
Oil of rose.....	6

Dissolve the last two ingredients in the minimum quantity of alcohol, and add to the others when melted.

JONES'S CLEANING POMADE.

Levigated rotten stone.....	Parts.
Iron subcarbonate.....	1
Oil of bitter almonds.....	3
Olive oil.....	enough to make a paste

JONES'S OINTMENT FOR CHAPPED HANDS.

Menthol.....	Parts.
Salol.....	3
Olive oil.....	4
Lanolin.....	100

Mix the menthol and salol thoroughly with the olive oil, and incorporate the mixture with the lanolin.

JONES'S COLD CREAM.

White wax.....	1 oz.
Spermace'i.....	1 oz.
Oil sweet almonds.....	5 fl. ozs.
Rose water.....	3 fl. ozs.

Melt the waxes in the oil of almonds; then gradually add the rose water, and stir until nearly cold; finally pour into suitable jars.

JONES'S HAIR DYE.

A.—Pyrogalllic acid.....	4 drams
Water.....	16 fl. ozs.
Alcohol.....	6 fl. ozs.
B.—Silver nitrate.....	1 oz.
Ammonia Water.....	2 ozs.
Water.....	8 fl. ozs.

JONES'S DENTINE.

White castile soap.....	¼ oz
Oil of peppermint.....	5 drops
Oil of wintergreen.....	12 drops
Glycerin.....	¼ fl. oz.
Water.....	1 fl. oz.
Alcohol.....	2 fl. ozs.
Tincture of cochineal.....	sufficient to color.

JONES'S HAIR RESTORER.

Castor oil.....	16 fl. ozs.
Alcohol.....	24 fl. ozs.
Tincture of cantharides.....	5 fl. drs.
Oil of bergamot.....	12 fl. drs.
Oil of rose.....	to drops
Red saunders.....	enough to color;

JONES'S CHERRY TOOTH PASTE.

Powdered orris root.....	2 ozs.
Powdered myrrh.....	¼ ozs.
Powdered pumice.....	2 ozs.
Honey.....	4 fl. ozs.
Oil of cloves.....	30 min.
Oil of lemon.....	30 min.
Oil of Rose.....	8 drops
Solution of carmine.....	sufficient to color.

JONES'S TONIC BITTERS.

Sugar.....	24 ozs.
Calamus root.....	24 ozs.
Orange peel.....	24 ozs.
Peruvian bark.....	24 ozs.
Gentian root.....	24 ozs.
Calumba.....	24 ozs.
Rhubarb.....	8 ozs.
Cinnamon.....	4 ozs.
Cloves.....	2 ozs.
Diluted alcohol.....	4 gals.

Reduce all the drugs to a coarse powder, and macerate two weeks with the menstruum; then filter.

JONES'S VITALIZING TONIC.

Nux vomica.....	3 drams
Damiana.....	1 oz.
Phosphoric acid.....	3 fl. drs.
Gentian root.....	1 oz.
Calumba.....	1 oz.
Water.....	2 fl. ozs.
Alcohol.....	sufficient to make 8 fl. ozs.

JONES'S COUGH SYRUP, NO. 1.

	Parts.
Oil of tar.....	1
Fluid extract of ipecac.....	4
Tincture of opium.....	4
Fluid extract of wild cherry.....	6
Magnesium carbonate.....	3
Water.....	60
Sugar.....	55

JONES'S COUGH SYRUP, NO. 2.

Ether.....	1 fl. dr.
Tincture of hyoscyamus.....	3/4 fl. oz.
Syrup of wild cherry.....	1 fl. oz.
Syrup of tolu.....	1 fl. oz.
Syrup of squill.....	1 fl. oz.
Syrup of tar.....	sufficient to make 4 fl. ozs.

JONES'S EXPECTORANT SYRUP.

	Grammes.
Tartar emetic.....	25
Aromatic spirit.....	4
Fluid extract of ipecac.....	25
Tincture of lobelia.....	4
Tincture of opium.....	8
Syrup of tolu.....	60
Tincture of digitalis.....	4
Syrup of squill.....	60

JONES'S "THREE DAYS" ANTI-GONORRHOEAL INJECTION.

Berberine hydrochlorate.....	15 gra.
Zinc acetate.....	15 gra.
Glycerine.....	1/4 fl. oz.
Water.....	sufficient to make 8 fl. ozs.

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The Vanilla Bean in Mexico.

BY CHARLES SCHAEFER,

U. S. Consul at Vera Cruz.

This bean is too well known to require a description at my hands. It is not difficult to grow, neither is it very laborious to cultivate. The district in which it is principally produced in Mexico is in the canton of Papantla, southwest of Tuxpan, about thirty miles back from the Gulf, in that section of country lying between the Nautla and Tuxpan rivers. In the forests, on the low hills of the above-named canton, it grows wild and in such profusion that the odor from it is sometimes sickening. In its wild state, it is considered common property, and gathered by the natives without cost to them, except the labor of picking. A French colony settled along the River Nautla, has gone into the cultivation of the bean pretty extensively, and seems to have improved it.

The soil on which the bean grows is a rich, sandy loam, or a vegetable mold, not too dry, and shaded—the wild by the forest trees, and the cultivated by the small trees planted for the purpose. The temperature where it grows is a mean of about 85° F. for the year—never very cold and never very hot, and the altitude up to 1,000 feet above sea level.

Planting.—The bean grows on a vine larger than the hop vine, but similar in its growth. Slips of the vine are planted, about three in number, at the foot of small trees, in ground prepared by spading or turning over the soil close to the tree; no other cultivation seems to be needed. These trees are planted 8 or 10 feet apart, the vine running or climbing to the top, whence it is conducted by poles from one tree to another, resembling a hop field. The ground between the trees is not disturbed, except immediately

about the roots, where it is cultivated twice yearly. The vine does not produce during the first year, and very little the second, but in the third it is supposed to bear a full crop, which is about 10 to 12 ounces of first-class beans, 10 to 16 ounces of second-class beans, and 15 to 20 ounces of third-class beans. This weight is after curing. The life of the plant is ten years.

Gathering.—From October 1 to January 1, the beans are picked or harvested, and, I am told, care must be taken that they are not bruised or packed close in large quantities, as overheating spoils them.

Curing.—Some place the beans in bake ovens, heated to about 120° F. for twenty-four hours. After that they are placed in woolen blankets and exposed to the sun—that is, the blankets are exposed, the beans being covered by them. Others tell me that the beans must be dried in the shade and never exposed to the sun, because such exposure would damage them by discoloration.

Preparing for Market.—After the beans have been treated as above, they are made up in bundles of fifty beans each, and wrapped in tin foil. The best are generally put in tin cylinders covered at both ends and holding one package of fifty beans, or about one pound each, in which condition they are considered fit for market.

Cost and Price.—The people who gather the vanilla are the natives (Indians) of the country, who are paid at the rate of about 50 cents per diem, Mexican money, without food or lodgings. Prices for labor, however, fluctuate, and it is the old question of supply and demand that governs prices.

The vanilla bean in this market is worth at present about \$7 per pound, Mexican money (about \$3.50 American money). This is the average price; the best is much higher and the poorest much lower. The cultivation of vanilla is considered very remunerative, and is a business easily learned.

Growing of vanilla and preparing it for market are two entirely different occupations, there being as much difference as there is in growing sugar cane and making sugar. There are about three men in the whole Republic of Mexico who seem to understand the correct process of curing the beans, and these men have made fortunes out of the business.

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The Assay of Medicated Gauzes.

The following methods for the assay of medicated gauzes, antiseptic dressings, etc., are credited to Professor Dupuy of the Faculty of Medicine and Pharmacy Toulouse, France. (Mont. Phar. Jour.). They are said to give approximate and sufficiently exact results in the valuation of these articles:

Borated Gauze.

A small quantity of the gauze is extracted with alcohol, which is then ignited; it should burn with the characteristic green flame of boric acid.

ASSAY.

According to the experiments of Prof Barthe, the best solvent for boric acid for this purpose is diluted glycerin 5 per cent., used at the ordinary temperature. This solvent permits of exact volumetric titration using decinormal solution of potassi-

um hydrate and phenolphthalein. Alcohol should not be used, as the end reaction is not so sharp.

The reagents to be employed are the following:

1ST. SOLUTION OF PHENOLPHTHALEIN.

Phenolphthalein.....	1 gm.
Diluted alcohol.....	100 "

2ND. DECINORMAL SOLUTION KHO.

This should contain 5 gr. 60 KHO to the litre and each Cc. is equivalent to 0.0062 gr. of boric acid.

Take 1 Gm. of the sample, taking care not to pick it out, as some of the acid might thus be lost, and treat it with the diluted glycerin 5 per cent.; to the solution add 6 drops of the indicator, and add the potash solution drop by drop from a burette, till a faint violet color is produced, which denotes the end of the reaction. From the number of Cc. of solution used the percentage of boric acid is then calculated; for example, it requires 15 Cc. of the solution of potassium hydrate to saturate the boric acid in a sample of cotton, what is the quantity of boric acid contained in the sample?

10 Cc. of solution saturate 0.062 of boric acid.

1 Cc. = 0.0062

15 Cc. = 0.093

1 Gm. therefore contains 0.093 of boric acid and 100 Gm. contains 9.3 or 9.3 per cent.

Salicylic Acid Dressings.

If a piece of salicylic gauze or cotton be touched with a glass rod dipped in dilute solution of ferric chloride, it produces the characteristic violet coloration.

ASSAY.

As salicylic acid is but slightly soluble in water, it is necessary to use the fluid in which it is most soluble, namely, ether. A definite weight of the cotton is treated with ether till the acid is entirely dissolved. After evaporation or distillation of the ether, the residue is weighed as salicylic acid.

Iodoform Gauze.

Iodoform gauze is easily recognized by its color and odor.

ASSAY.

A known quantity of the dressing is extracted with ether, which on evaporation in a water bath leaves the iodoform behind.

Salol Dressings.

These also, in the treatment with diluted solution of ferric chloride, give a violet coloration.

ASSAY.

A known quantity is extracted with ether, which, after evaporation, leaves the salol.

Mercuric Chloride Dressings.

If a previously moistened sample be treated with the reagents for mercuric salts, the characteristic reactions should be produced.

ASSAY.

These dressings may be volumetrically estimated by Personne's method, which depends upon the following principle: When to a solution of mercuric chloride a dilute solution of potassium iodide is added, potassium chloride and a double iodide of mercury and potassium are formed, which dissolve to form a colorless solution, till one-half the potassium iodide has been used by the mercuric chloride, when the further addition of this compound produces a slight persistent precipitate of mercuric iodide.

The potassium iodide solution is prepared by dissolving 8.82 Gm. of the salt in sufficient distilled water to produce 1 litre, 10 Cc. of this solution saturate 0.018 Gm. of mercuric chloride. 10 Gm. of the dressing are treated with two portions of 200 Cc. of water containing some sodium chloride (to facilitate the solution of the mercuric salt). The solution is then filtered, and to 100 Cc. the solution of potassium iodide is added from a burette, till the red precipitate formed remains undissolved. From the quantity used the proportion of chloride is then calculated.

:o:

The Chemistry of Ipecacuanha.*

BY DR. B. H. PAUL AND A. J. COWNLEY.

Since the publication of our last paper on this subject we have endeavored to prepare larger quantities of the salts of the two bases we then described, and in the course of our experiments have been struck with the comparative facility with which the emetine hydrochloride crystallizes in the presence of an excess of acid. Upon adding moderately strong hydrochloric acid to emetine it is immediately converted into a bulky mass of fine silky crystals, whereas the formation of crystals from a neutral aqueous solution of the salt does not take place until after some considerable length of time, and the solution has become very concentrated. This difference of behavior suggested the possibility that an acid salt was formed, but on analysis of the silky mass of crystals that was not found to be the case. Considerable difficulty was experienced in obtaining the salt in a state fit for analysis, on account of the large quantity of mother liquor retained by the crystals. Drying by heat gave a salt that was neutral, containing 12.83 per cent. HCl as previously stated.

On pressing the spongy mass of crystals between bibulous paper the material thus imperfectly dried gave the following results on analysis:

	Found.	Calculated for $C_{15}H_{22}NO_5 \cdot HCl \cdot H_2O$.
Emetine	67.62	73.26
HCl	12.79	10.73
Water (by difference)	19.59	15.96
	100.	100.

It appears evident from these results that no acid salt is formed, though the presence of free acid promotes the crystallization of the neutral salt. The amount of hydrochloric acid in a dry acid salt having the composition $C_{15}H_{22}N O_5 \cdot 2HCl$ would be 22.74 per cent.

Cephæline behaves in a somewhat similar manner. A neutral solution of the hydrochloride dries up over sulphuric acid to a varnish-like residue without any sign of crystallization. But when the solution contains excess of acid, fine, transparent, rhombic crystals are formed. In this case also the salt formed is not an acid salt, as seemed to be probable. When dried over sulphuric acid it gave the following results on analysis:

CEPHÆLINE HYDROCHLORIDE CRYSTALLIZED FROM SOLUTION CONTAINING EXCESS OF HYDROCHLORIC ACID.

	Found.	Calculated for $C_{15}H_{22}NO_5 \cdot HCl \cdot 3Aq$.
Cephæline	72.0	72.11
HCl	11.8	11.25
Water (by difference)	15.8	16.64
	100.	100.

A dry acid salt having a composition corresponding to the formula $C_{15}H_{22}N O_5 \cdot 2HCl$ would contain 23.96 per cent. of hydrochloric acid.

Indications of this remarkable tendency to crystallize in the presence of excess of acid have previously been observed in the investigation of the ipecacuanha alkaloid by Dumas and other chemists.

The current number of the *Archiv der Pharmacie* contains a communication from Dr. Kunz-Krause of Lausanne, in reference to the papers published in this journal on the alkaloids of ipecacuanha.* Dr. Kunz-Krause lays claim to priority in the publication of a description of the basic constituent of that drug, and of various conclusions as to its molecular formula, etc. The chief details of the results arrived at by Dr. Kunz-Krause in his investigation were stated in the following propositions, which appear at the end of the paper published by him in 1887:†

I. That emetine has the molecular formula $C_{15}H_{22}N O_5$, and yields a platinum salt, having the composition



II. That it is consequently a bi-acid base like quinine.

III. That it is a diamine (tertiary), since it yields, after addition of methyl, an ammonium base, methyl-emetonium hydrate:



IV. That emetine is very probably, like quinine, a derivative of chinoline.

These propositions are now republished by Dr. Kunz-Krause, supplemented by some others relating to the constitution of emetine, and they are referred to by him as representing the existing state of knowledge of this subject, for the elucidation of which Dr. Kunz-Krause claims priority. That claim, however, is at once superfluous and inadmissible, for the data we have given as the result of our observations upon the physical characters, composition and salts of ipecacuanha bases are totally incompatible with those given by Dr. Kunz-Krause, and the previous publication of his paper was duly acknowledged by us. It is not therefore a question of priority, but one of reality which has to be considered.

In the description of the results obtained in our study of ipecacuanha we furnished evidence of the existence of at least two distinct bases in that drug, the difference between them being marked by their physical characters, by their composition, and by their salts. This difference is especially indicated by one of the bases being crystallizable and freely soluble in caustic alkali, while the other one is uncrystallizable and insoluble in caustic alkali. Those observations were recorded with a full knowledge of the conclusions at which Dr. Kunz-Krause had arrived in 1887; they did not raise any question as to the prior publication of his paper on the subject, and though they were of a nature to throw doubt upon his conclusions as to the individual nature and constitution of the base which he had described under the name of emetine, their publication is not, as he suggests, an "unjustifiable criticism" of his previous work. The reasons for the doubt as to the nature of the base are distinctly stated at the end of our last paper, and may be here briefly recapitulated.

The paper published by Dr. Kunz-Krause in 1887 contains internal evidence that the basic product obtained by him from ipecacuanha, and named emetine, was not a chemically individual substance, but an indefinite mixture of two or more of the different bases which we have described. Thus, for instance, the sparing solubility of the substance in cold ether, its melting point, its capability of crystallizing, and its comparatively considerable solubility in hot petroleum spirit, and even in water, as well as its partial solubility in caustic potash are characters which do not belong to the base isolated by Glénard and described by him under the name of emetine, or to the amorphous base of corresponding composition which we obtained. These are characters which are approximate to, though they are not exactly the same as, those of the other base we have isolated and named cephæline.

The uncrystallizable base identical with that described as emetine by Glénard, is soluble in ether, but insoluble in caustic alkali, and very sparingly soluble in water. It is also very sparingly soluble in petroleum spirit, even with the aid of heat, and owing to its low melting point it readily aggregates into a mass, which is then so little acted upon by the solvent as to be almost insoluble.

Bearing that circumstance in mind, it is obvious that the process by which Dr. Kunz-Krause prepared the substance he described as emetine, viz., extraction by boiling petroleum spirit, was just of such a nature as to give a mixture consisting chiefly of cephæline with a small proportion of true emetine, and presenting characters belonging partly to one base and partly to the other. Analytical data relating to such an indefinitely mixed substance are necessarily of little value, however numerous they may be. Consequently the conclusions arrived at by Dr. Kunz-Krause as to the composition and constitution of emetine are wanting in foundation adequate for the purpose, and for that reason we abstained from entering upon a premature discussion of the views expressed by him as to the constitution of emetine, confining ourselves to a bare statement of the results of experiment.

The paper which has just been published by Dr. Kunz-Krause in the *Archiv* contains much that is irrelevant to the main issue above stated, and the settlement of that issue would only be obscured by entering into a discussion of these subordinate points. It may, however, be useful to give a comparative statement of the figures by which the percentage composition of the substances in question have been expressed.

	EMETINE.		CEPHÆLINE.	
	Glénard. 1876.	Kunz. 1887.	Paul and Cownley.	Paul and Cownley.
	Mean.		Mean.	
Carbon	72.16	70.61	72.01	71.28
Hydrogen...	8.12	7.93	8.86	8.69
Nitrogen...	5.35	5.59	5.75	6.24
Oxygen	14.27	15.96	13.38	13.73
	100.	100.	100.	100.

We hope shortly to be able to publish further descriptions of the salts of these bases, together with an account of their physiological action.

† A solution containing only a part of the hydrochloride becomes turbid on addition of a drop of caustic soda solution.

* The Pharmaceutical Journal and Transactions.

* Pharm. Journ., liii., 61, and liv., 111.

† Archiv. der Pharm., [1], xxv., 41.

Some Perfume Formulas.

ALEXANDRA BOUQUET.

Oil of bergamot.....	3 lias
Oil of rose-geranium.....	3 ss
Otto of rose.....	3 ss
Oil of cassia.....	3 xv
Cologne spirit.....	0 j

ESS. BOUQUET.

(1)

Otto of rose.....	3 iv
Oil of neroli.....	3 ij
Essence of musk.....	3 xl
Jasmine extract.....	3 ss
Tincture of orris.....	3 vij
Cologne spirit to make.....	0 lb

(2)

Oil of neroli (petale).....	3 xv
Oil of lemon.....	3 j
Oil of bergamot.....	3 ss
Cassie extract.....	3 ss
Essence of ambergris.....	3 ss
Tincture of orris.....	3 ss
Spirit of rose.....	3 vij
Cologne spirit.....	3 v

(3)

Oil of bergamot.....	3 ij
Oil of lemon.....	3 j
Tincture of ambergris.....	3 j
Tincture of orris.....	3 ij
Spirit of rose.....	3 iv

Mix, and filter with French chalk.

(4)

Ol. lavand. ang.....	3 ss
Ol. neroli super.....	gtt vijj
Ol. rose virgin.....	3 ss
Ol. bergamot.....	3 xlv
Ess. moschl.....	3 lias
Ess. ambergris.....	3 v
Cologne spirit.....	3 vijj

BRIDAL BOUQUET.

Oil of sandalwood.....	3 ss
Rose extract.....	3 iv
Jasmine extract.....	3 iv
Orange-flower extract.....	3 vj
Essence of vanilla.....	3 j
Essence of musk.....	3 ij
Tincture of storax.....	3 ij

BRIGHTON NOSEGAY.

A refreshing perfume for the handke chief, resembling but excelling, Mon^a Bouquet.

Ess. moschl.....	3 iv
Ol. bergamot.....	3 ss
Extrait jasmin.....	3 ij
Ol. lavand. ang.....	3 ss
Ol. neroli.....	3 ss
Ol. patchouli.....	3 v
Ol. pimentæ.....	3 v
Ol. rose.....	3 ss
Ol. verbenæ.....	3 vijj
Ol. cassia.....	3 v
Alcohol ad.....	0 iv

Macerate one month, then filter three times.

CARNATION PINK.

Oil of cloves.....	3 v
Cassie extract.....	3 iv
Jasmine extract.....	3 ij
Orange-flower extract.....	3 iv
Rose extract.....	3 vijj
Essence of civet.....	3 j
Essence of vanilla.....	3 j
Tincture of storax.....	3 j
Spirit of yang-yang.....	3 v

CAROLINE BOUQUET.

Oil of lemon.....	3 xv
Oil of bergamot.....	3 j
Rose extract.....	3 iv
Tuberose extract.....	3 iv
Violet extract.....	3 iv
Tincture of orris.....	3 ij
Essence of ambergris.....	3 j

Mix, and filter after ten days.

CEDAR OF LEBANON BOUQUET.

Oil of cedar-wood.....	3 j
Spirit of rose.....	3 vj
Alcohol.....	3 xv

CHERRY BLOSSOM.

(1)

Essence of white heliotrope.....	3 vj
Essence of vanilla.....	3 j

(2)

Essence of peach-blossom.....	3 xij
Violet extract.....	3 ij
Essence of mirbane.....	3 j

OHYPRE.

Oil of rosemary.....	3 c
Oil of bitter orange.....	3 ss
Oil of petitgrais.....	3 ij
Oil of bergamot.....	3 lias
Oil of limetta.....	3 ss
Oil of neroli.....	3 xlv
Cologne spirit.....	0 iv

Mix, and after four days add 10 oz. of distilled water. Allow to remain at rest for a fortnight, and filter.

ESSENCE OF CLOVE PINK.

(1)

Rose extract.....	3 xiv
Orange-flower extract.....	3 vij
Essence of vanilla.....	3 lias
Oil of cloves.....	3 xx

Mix, and after standing for several days, filter.

(2)

Oil of cloves.....	3 xij
Cassie extract.....	3 v
Orange extract.....	3 v
Rose extract.....	3 x
Spirit of rose.....	3 vij
Essence of vanilla.....	3 ij
Essence of musk.....	3 ss

COURT NOSEGAY.

Rose extract.....	0 i
Violet extract.....	0 i
Jasmine extract.....	0 i
Spirit of rose.....	0 i
Essence of musk.....	0 i
Essence of ambergris.....	0 i
Oil of lemon.....	0 i
Oil of bergamot.....	0 i
Oil of neroli.....	0 i

NIGHT-BLOOMING CEREUS.

Essence of civet.....	3 j
Tincture of Tonka bean.....	3 ss
Tincture of benzoin.....	3 v
Spirit of rose.....	3 iv
Jasmine extract.....	3 iv

ESSENCE OF ENGLANTINE.

Oil of lemon.....	3 ss
Oil of lavender.....	3 vij
Oil of bergamot.....	3 v
Oil of neroli.....	3 ij
Oil of cedrat.....	3 v
Oil of cloves.....	3 v
Oil of sandalwood.....	3 j
Oil of cinnamon.....	3 ss
Oil of caraway.....	3 ss
Oil of nutmeg.....	3 ss
Essential oil of almonds.....	3 xv
Millefeurs.....	3 xij
Jasmine extract.....	3 ij
Essence of ambergris.....	3 j
Essence of musk.....	3 j
Cologne spirit.....	3 Cong. j

Mix, allow to stand a month, and filter.

EMPRESS OF INDIA BOUQUET.

Grain musk.....	3 ss
Ambergris.....	3 ss
Civet.....	3 gr. xv
Otto of rose.....	3 xlv
Oil of rhodium.....	3 xv
Oil of Bergamot.....	3 i vas
Oil of lavender.....	3 vj
Essence of Tonka bean.....	3 ij
Essence of patchouli.....	3 ij
Jasmine extract.....	3 v
Triple rose-water.....	3 ij
Cologne spirit.....	3 xlvij

Macerate a month, and filter.

ESTERHAZY BOUQUET.

This favorite Hungarian bouquet has as great a reputation in Austria as Eau de Cologne has in Germany or England.

Oil of cloves.....	3 xv
Oil of sandalwood.....	3 xv
Essence of ambergris.....	3 ss
Tincture of orris.....	3 vj
Essence of vanilla.....	3 vj
Tincture of Tonka.....	3 vj
Spirit of vetiver.....	3 vj
Spirit of neroli.....	3 vj
Orange extract.....	3 vj
Spirit of rose.....	3 vj

EUGENIA BOUQUET.

Tuberose extract.....	3 vijj
Essence of civet.....	3 ss
Essence of musk.....	3 ss
Essence of vanilla.....	3 ss
Tincture of benzoin.....	3 ss

JOCKEY CLUB.

(1)

Jasmine extract.....	3 iv
Otto of rose.....	3 j
Essence of musk.....	3 j
Tincture of Tonka bean.....	3 ij
Cologne spirit.....	3 ix

(2)

Spirit of rose.....	3 iv
Tuberose extract.....	3 iv
Cassie extract.....	3 j
Essence of civet.....	3 j
Rose extract.....	3 j
Jasmine extract.....	3 j
Orange-flower extract.....	3 j
Essence of musk.....	3 j

(3)

Tincture of orris.....	3 ij
Essence of civet.....	3 ij
Essence of ambergris.....	3 vias
Essence of musk.....	3 vias
Cassie extract.....	3 ias
Tuberose extract.....	3 ias
Rose extract.....	3 ij
Spirit of rose.....	3 vj

EXCELSIOR BOUQUET.

Extrait violette de Parme.....	3 iv
Ol. bergamot.....	3 ij
Moschl.....	3 gr. xx
Ol. santal. flav.....	3 ij
Ol. lavand. ang.....	3 ij
Ol. rose virgin.....	3 lias
Aque flor. aurant.....	3 ij
Alcohol ad.....	3 xxx

Mix, and macerate one month, then filter.

FLORAL BOUQUET.

Jasmine extract.....	3 ij
Millefeurs.....	3 v
Spirit.....	3 vj

FLORAL EXTRACT.

Grain musk.....	3 gr. xij
Oil of bergamot.....	3 ss
Otto of rose.....	3 ss
Oil of cassia.....	3 ss
Oil of cinnamon.....	3 j
Oil of neroli.....	3 xx
Jasmine extract.....	3 iv
Alcohol.....	3 Oivas

Mix, and after a month filter.

FOLKESTONE BOUQUET.

Musk.....	3 ss
Oil of Neroli.....	3 ss
Oil of lavender.....	3 ss
Oil of cloves.....	3 ss
Oil of sandalwood.....	3 ss
Otto of rose.....	3 j
Oil of bergamot.....	3 ss
Millefeurs.....	3 iv
Jasmine extract.....	3 iv
Tincture of Tonka bean.....	3 iv
Tincture of orris.....	3 iv
Triple rose water.....	3 x
Triple orange flower water.....	3 x
Alcohol.....	3 Oiv

Macerate a month, and filter.

FRANGIPANNI.

(1)

Oil of bergamot.....	3 lias
Essence of vanil a.....	3 lias
Tincture of tolu.....	3 ias
Essence of musk.....	3 ias
Rose extract.....	3 j
Cassia extract.....	3 j
Jasmine extract.....	3 vijj
Alcohol.....	3 Oj

(2)

Oil of neroli.....	3 xv
Oil of sandalwood.....	3 xxx
Otto of rose.....	3 xv
Essence of musk.....	3 iij
Essence of ambergris.....	3 vj
Spirit of vetiver.....	3 ij
Violet extract.....	3 ij
Alcohol.....	3 Oj

HELIOTROPE.

(1)

Essential oil of almonds.....	3 x
Essence of civet.....	3 ss
Spirit.....	3 ij
Essence of ambergris.....	3 ij
Orange flower extract.....	3 ij
Rose extract.....	3 iv
Essence of vanilla.....	3 vijj

(2)	
Heliotropin.....	gr. xv
Otto of rose.....	℥iv
Oil of bitter almonds.....	℥ij
Essence of musk.....	3 ij
Ess. bouquet.....	3 ij
Jasmine extract.....	3 viii

(8)	
Heliotropin.....	3 iv
Compound Essence of orris.....	℥iss
Rose extract.....	3 viii
Jasmine extract.....	3 viii
Oil of neroli (pétale).....	℥i
Oil of bergamot.....	3 ij
Essence of musk.....	3 iv
Otto of rose.....	3 ij
Compound Essence of Tonka bean.....	3 viii
Cologne spirit.....	℥iv

Allow to stand for fourteen days, then filter three times through English grey filtering paper.

WHITE HELIOTROPE.

(a)	
Heliotropin.....	3 ij
White-rose extract.....	3 ij
Jasmine extract.....	3 ss
Essence of musk.....	3 ss
Alcohol to.....	℥iv

(b)	
Spirit of neroli.....	3 iv
Oil of bergamot.....	3 j
Essential oil of almonds.....	℥iv

Mix.

Allow a and b to stand separately for a week, then mix them, and filter.

(To be Continued.)

:o:

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make us of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, it uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

An Unsightly Cinchona Mixture.—L. F. submits the following prescription with a request for explanation of the cause of the turbidity which makes its appearance after the mixture stands. He also asks how the unsightly appearance of the mixture may be prevented or remedied. The prescription reads:

Infus cinchon.....	3 viii
Spirit ammon arom.....	3 ss
Potass bicarb.....	3 ii
Tinct cinnamon.....	3 vii
Tinct nucis vom.....	3 i
Tinct cinchon.....	3 ss

This prescription is evidently a survival of the days when mixtures were not deemed of much account unless they were thick and unsightly. In those days when a physician found that he had by accident produced a decent looking compound, he immediately corrected his mistake by adding charcoal or other coloring matter to bring the mixture to the fashionable color and consistency. At least so we are credibly informed by a retired professor.

The words "Tinct Cinch 3 ss" which appear at the foot of the prescription would indicate that the pharmacist who first compounded the prescription had made the infusion of cinchona extemporaneously from the tincture. This in part explains the cause of the turbidity. In ordering infusion of cinchona in combina-

tion with alkalies the prescriber evidently had in mind the power of alkalies to dissociate the active principles of the cinchona. Water extracts only a limited amount of the alkaloidal principles of the drug, while alcohol is obviously more useful as an extractive. Thus, while precipitation takes place no matter whether the infusion is made according to the pharmacopœial method of preparing infusions, or extemporaneously from the tincture, if a properly prepared infusion is used the mixture will retain its clear appearance longer, though precipitation and clouding will ultimately ensue. There is no way of avoiding the turbidity except by omitting the alkalies.

Richmond's Samaritan Nerve.—E M—A preparation which cannot be told from the original consists of

Potassium bromide.....	3 i
Sugar.....	3 i
Caramel.....	℥xx
Water.....	℥ 3 v
Dissolve and add	
Oil of cassia.....	℥ x

Weld's Syrup of Iron Chloride.—D E S.—This is claimed to be a practically non-alcoholic preparation of iron containing two drops of the tincture of iron chloride in each fluid half-ounce. We are unable to state its exact composition.

Why Does This Mixture "Ferment?"—D. G. S., writes: Will you kindly inform me why the following prescription ferments upon standing. After allowing the mixture to stand a few months, a gas is formed which blows the corks out of the bottles and sometimes shatters the containers?

Mixt. glycyrrhizæ comp.....	℥ 3 i.
Syrup of ipecac.....	℥ 3 ss.
Syrup of squill & s.....	℥ 3 ss.
Syrup of tolu.....	℥ 3 ii.
Simple syrup.....	℥ 3 iv.

We are unable to give a definite explanation of this. If, as is the custom in many pharmacies, the sweet spirit of nitre contained in the compound liquorice mixture has been neutralized to excess with an alkaline bicarbonate, the mixture will probably prove unstable; the acids of the syrup of squill and ipecac combining with any free bicarbonate that may be present to cause effervescence and the expulsion of the stopper. We would like to have the opinion of our readers on the cause of the "fermentation."

Williams Pink Pills.—L. M. Asks for information concerning the composition of these pills. The makers, he says, claim a tonic virtue for the pills apart from their laxative properties. Will some one of our readers kindly look into this and report?

Carter's Little Liver Pills.—F. L.—Frederick Stearns & Co's "New Idea" printed a formula for this pill some time ago. The weight of twelve of "Carter's Little Liver Pills" is about 7½ grains, of which probably 2 to 2½ grains is sugar-coating. They contain podophyllin, aloes and capsicum. The following formula approximates the original:

Podophyllin resin.....	gr. iiss.
Aloes.....	gr. iiii.
Capsicum.....	gr. iiss.
Mucilage of acacia.....	q. s.

Mix, divide into 12 pills and coat with sugar.

A pill said to be equal or superior to Carter's may be made as follows:

Podophyllin resin.....	3 grains.
Jalapin.....	4 grains.
Comp. extract colocynth.....	12 grains.
Extract of hyoscyamus.....	12 grains.
Oil of peppermint.....	1 minim.

Make a mass and divide into 12 pills.

Prunelle Cordial.—A recent number of L'illustration contains the following excellent recipe for the preparation of "eau de prunelles Alsace," a name which we have taken the liberty of translating into "prunelle cordial," as above.

Prunes.....	2 wineglassfuls
Milk.....	2 wineglassfuls
Alcohol.....	2 pints
Water.....	2 pints
Sugar.....	2 pounds

Stone the fruit and macerate the crushed kernels in alcohol for one month. Decant the tincture thus obtained and to the marc of crushed kernels add the milk, boiling hot; and macerate for twenty-four hours. Filter and add the sugar previously made into a syrup with the water. The secret of the bland pleasant taste which is thus obtained, lies in the use of the milk. "C'est le lait qui rend la liqueur onctueuse et c'est le secret de la fabrication."

Elixir Ferri Peptonate.—J. J. G.—The following is said to furnish a satisfactory compound:

Pepsine (in scales).....	3 ss
Dried Egg Albumen.....	3 x
Simple Syrup.....	℥ 3 iv
Solution of Dialysed Iron.....	℥ 3 ii
Aromatic Elixir.....	℥ 3 xii
Distilled Water, up to.....	℥ 3 cxxx

Dissolve the albumen in 25 ounces of water, add the pepsine and digest for four hours at 104° F. Mix the syrup, and solution of iron, with 70 ounces of water, then add to the pepsine solution and heat to 194° F. Cool, add the brandy and sufficient water to make up to 125 fluid ounces. Set aside for eight days, and then decant the clear solution.

Hooper's Female Pills. L. S.—This is an old English proprietary compound, the formula of which is given as follows:

Aloes Barbadoes.....	3 viii
Ferri sulph. exsicc.....	3 iiii
Ferri sulphato cryst.....	3 iv
Extract hellebori.....	3 ii
Myrrha.....	3 ii
Saponis.....	3 ii
Canella.....	3 i
Zingiberis.....	3 i

Make a mass with water and divide into 2½ grain pills.

TINCTURA HÆMOSTYPTIC.

[FRITSCH AND LANGKOFF.]

	Grammes
Ergot of rye.....	70
Alcohol.....	20
Sulphuric acid.....	2
Hot water.....	500

Boil down to 200 gm. and add

Calcium carbonate.....	5
------------------------	---

Filter and evaporate the filtrate down to 70 gm., and add

	Drops
Alcohol.....	30
Essence of ginger.....	111

Let stand until it settles, filter and preserve.

CREME CELESTE.

[REVISTA DI CLINICA MEDICA.]

	Parts.
White cerate.....	80
Spermaceti.....	80
Oil of sweet almond.....	600
Glycerin.....	120
Distilled water.....	120
Borax.....	5
Cumarin.....	5
Attar of rose.....	0.03
Oil of Bergamot.....	0.50
Essence of orange flower.....	0.50
Attar of iblang-iblang.....	0.50
Attar of iris.....	0.10
Tincture of amber.....	0.30

Mix. If desired, color with alkanet dissolved in a part of the oil of almond.

Nervous System in the Vegetable World.*

By PROFESSOR GREEN, M.A., D.Sc.

The study of natural history at all times was to him very fascinating, and perhaps in no case more so than in the comparisons of plant and animal life. For some time the idea that all living matter, both plant and animal, had its origin in the same original groundwork had been gaining ground. One by one the old division lines had broken down, and it was now that there scarcely remained even the one crucial distinction, that of feeling.

DEFINITION OF NERVOUS SYSTEM

Firstly, what was meant by a nervous system? Though it may be a very small matter in the case of the low organisms, it is not by any means a simple one. Three main ideas are involved:—(1) The origination of movements and other processes, depending on some vital molecular change; (2) the reception of external stimuli, as in the case of our own senses, and the responses to these as exhibited by special movements, etc., brought about by (3) the power of co-ordination, which connects and sways the stimulus and the response. As the groundwork from which to start, he would show them examples of the simplest plant and animal life which existed. Slides of the *Amœba* and of *Althallium* ("flowers of tan") one of the *Myxomycetes* were then thrown up on the screen. The responses of both of these organisms to external stimuli were then briefly described.

INFLUENCE OF ENVIRONMENT.

While animals, went on Professor Green, chiefly respond to stimuli by motion and locomotion, plants are far more restricted on account of their surroundings. Now, when an individual is in perfect harmony with its surroundings, it is in a "healthy state." Therefore plants must, in order to reach the acme of perfect health, adapt themselves completely to their surroundings. Now, as these are stationary, the chief points are that they are exposed only to gaseous contact, except in the case of the root, and the air therefore plays an important part in their life history. The chief factors of change in the surroundings of the plant will therefore be the temperature, light, and humidity, while in the root, the fineness of the particles, humidity and nutritive power of the earth will be the most variable elements. earth will be the most variable elements. The plant, therefore, must adapt itself to these changes. The advantages to itself by these adaptations are obvious, as seen by the broad expanse of the leaf, with its chlorophyll grains exposed to a large surface of light. The root, on the other hand, will adopt itself by means of its root-hairs to the absorption of nutriment from the soil. Extreme variations of external condition, often amounting to positive danger, have often to be met. For example, the light may be too strong or too weak, the temperature may be too high or too low, the air may be too dry, or the soil too poor. As an example, the chlorophyll grain, which in normal light, set with as much surface as possible to the light when exposed to excessive sunlight will retreat into the corners of

the cell, and hide from the light as far as possible. There is certainly no doubt that many plants show what is at least the foreshadowing of nervous movements. For example, the common telegraph plant (*Desmodium gyrans*) shows in normal light and other conditions a regular rotating of its leaves which move round in a wavy manner about once every two minutes. In bad light, or when other circumstances are unfavorable, this power is lost; thus the idea of real sensitiveness is strengthened. The normal and optimum condition for these phenomena to be observed is termed phototonus, and the plant is said to be in a phototonic condition, and in this condition the plant is able to respond to nervous stimuli. A specimen of *Mimosa pudicans* was then showed, but its condition was not such that its irritability could be shown, as it had been out of the greenhouse for a whole day.

DIRECTIONS OF THE IMPULSE.

There are two chief directions in which nervous impulses may be turned. (1.) The motor mechanisms or efferent impulses such as the power of movement brought about by an electric stimulus. This was well seen in the case of the *Alga mesocarpus*, which, when under the influence of an electric current, split up into cells on account of the strong effect of the current. But the more important were sensory or afferent impulses, brought about by a special response to an external stimulus, such as our sense of smell or taste. As a rule, a special response follows in a different part of the organism to that which has received the stimulus. As the Jew said, "Tickle us and we do laugh." And certainly in some ways plants are more sensitive than animals. They might not believe him, but plants had a distinct rudimentary sense of vision. For vision is only an appreciation of the difference of the intensity of light, and among ourselves we have every gradation from the blind man to the one who can see perfectly. The spores of numbers of plants he could mention, when placed on the stage of a microscope, would exhibit a perfectly indifferent kind of movement, but if illuminated by a beam of light in a given direction they will exhibit very definite movements. These spores, and others of like nature, will move toward or from the source of light, according to whether they like the light or not. In botanical nomenclature this is known as heliotropy. Two specimens of plants were then shown, one having been grown in the open with its stems in their normal position, and one having been grown under a box with a small window in it; there, all the stems had grown toward the window.

THE PLANT SEEKS LIGHT.

Darwin had made a number of experiments on this question. Some small plants were placed in a dark room at 12 feet from a small lamp. The light was so small that a pencil mark on a paper could not be detected at the place where the plants were. In $7\frac{1}{2}$ hours every plant had made a distinct curvature toward the lamp. Moreover, it was just the tip of the stem which was sensitive, and that only, for the tips of the stem of the sensitive plant *Mimosa*, were covered with tiny cups, and found to behave exactly as if they were in the dark. Rudimentary it might be, but it appeared to be a sense of vision. With regard to the

sense of touch, he would divide that into three headings:—1. Difference in temperature; 2. Contract proper; 3. The sense of moisture. These are all possessed by us and by plants in common.

"SLEEP" MOVEMENT IN PLANTS.

The so-called sleep movements at night, when the temperature has fallen and the light becomes less, were examples of the first. They were well seen in *Desmodium* and *Cassia*, or the crocus flower. In *Mimosa*, the organ which is responsible for the movements is the pulvinus, a swelling at the base of the petiole. Certain changes occur in the cells by which water is driven out of certain cells into others, causing the change in the curvature of the stem, aided by the weight of the plant. In the case of roots they grow downward, but must often come into contact with small impassable particles, such as pieces of stone. They must then simply grow round them. Darwin illustrated this well by placing small pieces of cardboard in the way of the tips of roots of haricot beans. The result was that they curved until they almost tied themselves in a knot. The tip was found to be, as in the case of the stem, the only sensitive part of the root.

SENSITIVENESS OF THE DROSERA.

One of the most peculiar movements of plants, however, was that of the tentacles of *Drosera*, the sun-dew. Thus, when a fly became entangled in its tentacles, they all moved towards the same point in response to a stimulus, and devoured the insect. The movement is due to what Darwin termed aggregation of the protoplasm. A piece of human hair, weighing $\frac{1}{100}$ of a grain, was sufficient to cause the same stimulus as the fly, and thus the *Drosera* tentacles are $2\frac{1}{2}$ times as sensitive as the tip of the human tongue. *Pinguicula* is another plant which, though less sensitive than *Drosera*, will entrap the insects by a similar response. Climbing plants are the only examples of this. Plants, too, have some appreciation of flavor, for *Drosera* will refuse anything it does not like, and accept what it does. It is not in the least affected by olive oil or tea; it does not like water—nor gum, nor sugar, nor strange, to say, alcohol. Meat in any form, milk or albumen, however, are much appreciated by it, as is ammonium carbonate. *Dionea* is also possessed of the sense of taste. Smell with us is closely associated with the sense of taste. When we have a cold, for example, we cannot appreciate our wine so much. This is due to our not being able to appreciate its "bouquet." Now, in the prothallus of the fern plants, the antherozoids manage to find their way to the archegonia, in order to fertilize the oosphores. It was found by Pfeffer that the archegonia secrete malic acid, and that malic acid was very attractive to antherozoids. But as for a taste effect, they would have to be in actual contact before the stimulus would be effected. It is only fair to think that they possess some powers of smell. The comparisons were then brought to a close by references to the effect of forces on us and on plants, as illustrated in the latter by the centrifugal machine, in which it is shown that they do respond directly to gravity and other forces. There are then afferent and efferent impulses which receive definite expression

* Read at an evening meeting of the British Pharmaceutical Society and reported in the British and Colonial Druggist.

by movements in other parts of the plants, and it seems only fair to consider that these are transmitted by some kind of co-ordinating organs analogous

to our own veins, which, though structurally ill-defined in plants, are by their action exceedingly well marked.

of State in a book to be provided by said Secretary of the State for that purpose, and shall pay to said Secretary of State for recording such license, the sum of twenty-five cents.

Sec. 8. Any member of said board of pharmacy may issue to any person, whom such member shall find on examination to be entitled to a license under this act, a temporary license for the practice of pharmacy, which license shall expire at the next meeting of said board.

Sec. 9. Each applicant for a license under section 6 of this act, shall pay to the treasurer of said board a fee of one dollar, and any person applying for a license or certificate under section 5 of this act, shall pay to said treasurer the sum of five dollars.

Sec. 10. Every person to whom a license is granted by the said board of pharmacy shall display the same in a conspicuous part of the pharmacy in which he does business.

Sec. 11. It shall be unlawful after the first day of April in the year 1895, for any person to practice as a pharmacist unless he shall have been granted a license by said board.

Sec. 12. Nothing in this act shall be construed to apply to the business of a practitioner of medicine, nor to prevent practitioners of medicine from supplying their patients with such medicine as they may deem proper. Nor to those who sell medicines or poisons at wholesale only, nor to the manufacture or sale of patent or proprietary medicines; and nothing in this act shall be construed to apply to the sale of drugs, medicines and poisons by dealers in general merchandise. Nothing in this act shall be so construed as to prohibit the employment in any pharmacy of apprentices or assistants for the purpose of being instructed in the practice of pharmacy; but such apprentices or assistants shall not be permitted to prepare or dispense physicians' prescriptions, nor to sell or furnish poisons, except in the presence of and under the personal supervision of a licensed pharmacist.

Sec. 13. Any person violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than twenty-five dollars, nor more than fifty dollars, or imprisonment not to exceed six months.

Sec. 14. All sums of money collected for licenses as provided by this act shall be paid to the Treasurer of the State immediately on receipt of same by the treasurer of the board.

Sec. 15. The State Auditor shall audit the accounts of members of the board, and shall allow them three dollars a day for time spent in the discharge of their duties and necessary expenses incurred, provided the amount received for licenses under the provisions of this act shall be sufficient to pay the same; but if the State Auditor shall, at any time, find upon investigation that said sums are not sufficient to meet the per diem and expenses as herein provided, then he shall allow the expenses in full and such percentage upon the per diem that the expenses of the State shall not exceed the receipts under the provisions of this act.

Sec. 16. The provisions of this act shall not apply to the sale of insecticides nor any substances for use in the arts.

Sec. 17. All acts and parts of acts inconsistent herewith are hereby repealed.

Sec. 18. This act shall take effect from its passage.
Bill passed Nov. 24, 1894.

—:O:—

Bibliography.

A TEXT-BOOK OF VOLUMETRIC ANALYSES with special reference to the Volumetric processes of the Pharmacopœia of the United States, designed for the use of pharmacists and pharmaceutical students, by Henry W. Shimpf, Ph.G., New York, John Wiley and Sons, 1894. (\$2.50.)

Besides the sections on volumetric analysis in the larger manuals like Fresenius, there are special hand-books on the subject like those of Sutton and Hart. These, however are written for the general analyst and do not specially discuss the methods required for pharmacopœial preparations. There was room, therefore, for a special book for pharmacists, and as the author says in his preface, "the requirements of the new edition of the U. S. Pharmacopœia in which many volumetric processes are given, necessitate on the part of the careful pharmacist a knowledge of this branch of analytical chemistry." We believe the author has filled this want well and has made a useful book. He has done thorough and careful work, too, in explaining the general principles of volumetric analysis, the use of indicators and the several forms of burettes.

Besides the well known methods of acidimetry and alkalimetry, of reduction and oxidation and of precipitation, he takes up



Tax-Free Alcohol.

Editor AMERICAN DRUGGIST:

Tax-free alcohol should attract the attention of every pharmacist of the country, and I am very well pleased to see that so prominent a body of men as the Philadelphia Druggists' Association have expressed themselves in favor of it.

Gentlemen of the above association and others who are in favor of tax-free alcohol, let me say to you that we can get it. How? By united action! And that action can best be brought about by the retail druggists. How? By using the lever in our hands at present, one of the largest the retail druggists ever had, and which is the very keystone of the trade. I refer to the Interstate Retail Druggists' League.

If the Philadelphia druggists had been members of the League they could have placed this matter before a large, powerful and united body of men who are organized for mutual benefit.

The Philadelphia druggists can have the assistance of all the New England States, and the cities of New York, Brooklyn, Louisville, Ky., St. Louis, Mo., and others by making the proper bid for it.

Gentlemen, the League branches are in it for business; they hold frequent meetings, thereby creating more than usual interest in subjects placed before them. I would like to have the Committee appointed by the Philadelphia Association take upon themselves the responsibility of organizing the city pharmacist into a branch of the League. President A. M. Rontey, of the New York Branch, or Prof. Luther F. Stevens, of Brooklyn, would I have no doubt be glad to give them all the assistance they need; and The American Druggist can be depended upon to lend willing aid.

I know that local branches have done splendid work in the State Legislature and their weight can be felt there; it certainly can if the County Branches place the subject before their respective United States representatives and senators.

The Retail Druggists' League is on the right track and we want to extend our tracks into new territory. Let every druggist invest in the stock of this extension, make a move while the iron is hot. Here in the New England States the druggists are reaping the benefits of the work they have done and their investments have paid them a nice dividend. I want you to make an effort, success is sure to follow. I did it in the State of Rhode Island, you my dear reader can do it in your own State. Try it!

ALBERT O. HULL.

President of the Mortar and Pestle
Club of Rhode Island.

Dec. 1, 1894.

The Vermont Pharmacy Law.

Editor AMERICAN DRUGGIST:

I inclose you a copy of the Pharmacy Law just enacted by our legislature. It was in much better shape when presented to our legislature, but it has been amended so as to suit certain localities, and does not look much like the bill drawn up by the association's committee; but still it is much better than no law, and, as I have written you before, can be amended as time advances and we think best.

A. W. HIGGINS,

President of the Vermont Pharmaceutical Association.
December 3.

We append herewith the full text of the law:

VERMONT PHARMACY LAW.

It is hereby enacted by the General Assembly of the State of Vermont.

Sec. 1.—There shall be a State Board of Pharmacy. The board shall consist of five pharmacists, residents of the State, to be appointed by the Governor in the month of November, 1894; one to be appointed for one year, one for two years, one for three years, one for four years and one for five years. The term of office of each of said members shall commence on the first day of December, 1894; and the Governor shall hereafter, annually, in the month of November appoint a pharmacist as a member of said board to succeed the member whose term shall expire on December first of that year. The Governor shall also fill all vacancies that may occur in said board.

Sec. 2. Each member of the board, before entering upon the duties of his office, shall take and subscribe to the following oath: I do solemnly swear (or affirm) that I will perform the duties of a member of the State Board of Pharmacy to the best of my judgment and ability according to law.

Sec. 3. The members of said board shall annually meet on the first Tuesday of January at the State House, at Montpelier, and shall organize by electing a president, secretary, and treasurer. Three members of said board shall constitute a quorum. They shall also meet at least once in three months at some place within the State for the examination of applicants for licenses and certificates. They shall give at least thirty days notice by mail to all known practicing pharmacists and applicants for license in the State of the place and time of meeting.

Sec. 4. Said board shall have the power to make such by-laws, not inconsistent with the constitution or the provisions of this act, as it may deem proper, and to revoke any license for just and sufficient cause.

Sec. 5. It shall be the duty of the State Board of Pharmacy to grant licenses for the practice of pharmacy within the State, which licenses shall be issued to persons twenty-one years of age, who have practiced pharmacy or served an apprenticeship with a pharmacist for the term of three years, and who shall have also passed an examination satisfactory to said board. Said board may also issue certificates upon examination, which shall entitle the holder to act as assistant pharmacist under the direction of a licensed pharmacist.

Sec. 6. Any person twenty-one years of age, who at the time of the passage of this act is carrying on the business of pharmacy, or shall have served three years or more at the business of retailing or dispensing drugs, or who holds a pharmacist's license from any legally created board of pharmacy, or who is a graduate of a legally incorporated college of pharmacy or of medicine, shall be granted a license on application.

Sec. 7. A person receiving a license under this act shall, within thirty days from the date thereof, cause the same to be recorded in the office of the Secretary

a variety of special volumetric methods that have been proposed for the determination of important organic compounds, such as the estimation of tannin, starch, sugar, phenol, pepsin and diastases. Part second also covers the sanitary analysis of water, milk analysis and urinary analysis, matters that the pharmacist is often called upon to undertake in the absence of specially appointed inspectors or analysts.

The book will certainly be of great help to the advanced pharmacist, who has the time and ambition to fit himself as an independent worker in these important branches. It is, moreover, well illustrated, clearly printed, and of convenient size for reference.

CHEMISTRY: GENERAL, MEDICAL AND PHARMACEUTICAL, INCLUDING THE CHEMISTRY OF THE U. S. PHARMACOPOEIA. A manual on the general principles of the science, and their applications in medicine and pharmacy. By John Attfield, F. R. S., Ph. D., F. I. C., F. C. S., etc. Fourteenth American Edition: Philadelphia: Lea Brothers & Co., 1894 (8s. 7s.).

In his preface to the new edition, Professor Attfield says it contains "such alterations and additions as seemed necessary for the demonstration of the latest developments of chemical principles and the latest applications of chemistry to pharmacy. Hence, even if compared with the immediately preceding editions, on nearly every page will be found some indication of the recent rapid growth of the science and the art of chemistry. On the other hand, synthetic and analytical processes which have become more or less superseded have been either omitted or described less fully. The whole work has thus been kept within the limits of a learner's manual, while the author has endeavored faithfully to portray the present relationship of chemistry to at least those areas of medicine and pharmacy with which students should become familiar in the days of their studentship."

With the possible exception of Remington's Pharmacy, we know of no work that has enjoyed a greater popularity among pharmacists than Attfield's Chemistry. The present edition is adapted to the United States Pharmacopoeia, and the chemical notation of the work is in accordance with modern views. It should find a prominent place in the library of every pharmacist.

Received.

Proceedings of the New York State Pharmaceutical Association at its sixteenth annual meeting held at Saratoga Springs, June 26, 27 and 28, 1894.

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College Place, New York.

Answers to Questions; Eighth Series.

71.—The Spanish fly belongs to the order coleoptera and is official. The potato fly and Chinese blistering fly are two closely allied flies which have the same medicinal action.

72.—In rearing the insect of the order of hemiptera referred to (the cochineal), the females are preserved under cover during the rainy season, and after the cessation of the rains are distributed upon the plants

out of doors. These perish very quickly after having deposited their eggs, which, hatched by the heat of the sun, give origin to innumerable minute insects which spread themselves over the plant. The males are in the proportion of one to one hundred or two hundred females, and are provided with wings and are very active. After fecundation the females, which before moved about, attach themselves to the leaves and increase rapidly in size, so that in the end they appear like excrescences on the plant. They are now gathered for use by detaching them by means of a blunt knife, a few being left to continue the race.

The two varieties of cochineal are known as silver grain and black grain.

73.—The systematic names of the cockroach are *Blatta* (*periplaneta*, Burmeister) *orientalis*, Linne. *B. gigantea* of the West Indies, *B. americana* of North America, and *B. germanica* of Central Europe. Class, Insecta; order, Orthoptera. Habitat, Asia, now found in most parts of the world, in kitchens and damp, warm rooms and are used as a diuretic in the form of a tincture or powder. The cockroach is about 25 millimeters or 1 inch long, oblong, flat; reddish brown or black brown; antennae long, filiform; head hidden beneath the prothorax; wings in male long, in female very short; odor very disagreeable.

74.—*Sanguisuga medicinalis* (Savigny). Speckled leech and *Sanguisuga officinalis* (Savigny). Green leech. They belong to the class, Vermes; order, Amelida; suborder Apoda and family, Herndinea. The habitat of the speckled leech is in Central and Northern Europe and the green leech in southern Europe, in fresh water ponds. The speckled leech has numerous black spots and draws about its own weight of blood. The green leech has a black line on each side unspotted and draws more blood than the speckled leech, and causes a larger amount to flow after it has fallen off. The body of a leech is 8 to 6 inches long, smooth, soft, round, somewhat flattened, narrowed toward both ends, composed of 90 to 100 rings; posterior end terminated by a broad disc, anterior end by a narrower disc in the centre with the mouth containing 8 jaws, each with a double row of teeth.

75.—The systematic name of the chicken is *Gallus Bankiva*, Temminck, *Phasianus Gallus*, Linne. Habitat Java and Cochinchina, domesticated. The egg consists of the shell and lining membrane about 10 per cent., of albumen 60, and yolk 30 per cent. The egg shell is composed of 90 to 97 parts of calcium carbonate, 1 to 3.7 calcium and magnesium phosphate, and 2 to 4.7 organic matter. Albumen or white of egg contains 82 to 88 per cent. water and 12 to 18 per cent solid constituents, mostly albumen, traces of fat, sugar and extractive, and about 0.65 ash, of which 42 per cent. is K Cl and 9 Na Cl, the remainder being carbonates, phosphates and sulphates of alkalis, calcium, magnesium and iron.

The yolk contains 48 to 55 parts water, 16 vitellin (a proteid related to casein, mixed with albumen) 30 fat, 1.5 inorganic salts (chlorides, sulphates, and phosphates of potassium, sodium, calcium and magnesium), 0.32 cholesterin; also lecithin, coloring matter, lactic acid and sugar.

76.—Russian isinglass is obtained from the Acipenser Huso, Linne (belugo); *Ac. Guldenstadti*, Brand et Ratzburg; *Ac. ruthenus*, Linne (sterlet); *Ac. stellatus*, Pallas (sewruge). It comes into commerce in separate sheets (leaf isinglass), several sheets folded together (book isinglass) and rolled or folded into various forms (staple isinglass), of horny or pearly appearance, whitish or yellowish, inodorous and insipid.

Agar agar is obtained from China and Japan principally, also from Ceylon and Macassar and is derived from several algae or sea weed

77.—Musk is obtained from the preputial follicles of the male animal, *Moschus moschiferus*, Linne. It is irregular crumbly, somewhat unctuous grains dark, reddish brown, and in the anhydrous state almost inodorous; the commercial article contains about 10 per cent. of moisture and has a peculiar penetrating and persistent odor and bitterish taste. Musk is contained in oval or roundish sacs about 5 centimeters or 2 inches in diameter, and about 2 centimeters or $\frac{1}{2}$ inch thick; on one side invested with a smoothish membrane, on the other side covered with stiff, appressed, grayish hairs concentrically arranged around two orifices near the center in the muscular coat with a portion of the thin penis

78.—Castoreum is a peculiar concrete matter found in both sexes in the preputial follicles between the anus and external genitals of the beaver, which inhabit the northern hemisphere between 33° and 68° north latitude.

79.—Pepsin is obtained from the mucous membrane of the stomach of the hog, *Sus scrofa*, Linne, the sheep, *Ovis aries*, Linne, or the calf *Bos Taurus*, Linne. The test for pepsin is, digested at 88° C or 100° F for six hours, a slightly opalescent solution is obtained from 1 saccharated pepsin, 500 water and 7.5 hydrochloric and 50 parts of hard boiled egg albumen.

80.—Hyraceum is a substance found in the Cape Colony which Thunberg and other travelers mistook for a kind of bitumen; but, according to Dr. Pappe, it is obtained from the urine of the Klipidas, which when passed is thick and of glutinous nature. It is used as a stimulant and antispasmodic.

Questions; Eleventh Series.

102.—A lump of sugar weighs 100 grains in air and 45.62 grains in oil of turpentine of a specific gravity of 0.84. What is the specific gravity of the sugar?

103.—A piece of a common metal weighs 228 grains in air and 208 grains in water. What is the metal and what its specific gravity?

104.—A crucible weighs 749 grains in air, and 714 grains in water. What is its specific gravity and of what is it composed?

105.—A bracelet weighs 700 grains in air, and 664 in water. What is its specific gravity, and of what is it probably composed?

106.—A lump of alum weighs 124 grains in air and 62 grains in turpentine (sp. gr. 0.872); what is its specific gravity?

107.—A bottle holds 2.2 pints of water, how much glycerin by weight would it hold expressed in grammes?

108.—One hundred grammes of calomel is placed in a one-litre flask which is then filled with water and weighs 1086 grains. What is the specific gravity of the calomel?

109.—A powder weighing 300 grains is placed in a 5,000 grain flask which is then filled with water and weighed, the total weight of the contents being 5250 grains. What is the specific gravity of the powder?

110.—Two hundred grains of a simple white medicinal powder is placed in a flask holding 1050 grains of water. The flask is then filled with water and the total contents is found to weigh 1223 grains. What is the specific gravity of the powder and what is its probable composition? It is insoluble.



Written for the
American Druggist and Pharmaceutical Record.

ANNOUNCEMENTS.

BY THOMAS J. KERNAN.

Any change in business, whether it be the taking on or dropping of a partner should call for a suitable announcement of the fact. Customers expect these little courtesies, and when advertising of this kind is neglected, it is safe to predict that public interest in the business will decline.

Every pharmacist is of course ready and willing to adopt any legitimate method to increase his business; and if some pharmacists, like physicians, object to all advertising as unethical, these are but the exceptions that prove the rule.

In addition to the ordinary advertising carried on at all seasons, and which is essential to the prosperity of any business there are times when special advertising is called for, and it is to give hints and suggestions for the carrying out of such advertising that these notes are written.

Suppose John Jones decides to enlarge his business and take in a partner. He makes the necessary arrangements looking to an agreement with either an employe who has merited promotion by faithful attention to his employer's interests—or perhaps he goes outside and selects an old schoolmate or college chum who is experienced in the business, as a partner. It does not take long to draw up an agreement satisfactory to both parties and answering all legal requirements.

The next thing that occurs to the enterprising pharmacist is to properly advertise the new partnership arrangement to his customers. And here is where he usually "strikes a snag;" for in the absence of any guide to the drafting of partnership announcements and circulars of that nature the pharmacist usually either presents a bald statement of the facts included in a three or four line item in the local newspapers or he allows the incident to pass entirely without notice.

A specimen of a partnership notice embodying what in my opinion represents the really essential features of such a document is shown herewith. The announcement is printed on heavy note paper in pica italic of some fancy design with a wide margin of white all around. The ink selected should either be a dark shade of blue, bronze blue for example, or a brown, which is equally effective.

The first page contains a simple and plainly worded announcement of the change in firm name, together with a reference to the increase in business

which has necessitated the change and a bid for the continued confidence and support of patrons.

On the third page the attention of the reader is arrested by an advertisement setting forth in an effective manner the efficiency of the various departments and calling attention to special lines.

These examples are taken from a circular issued recently by Breen & Froatz,

a firm of retail pharmacists in this city. The results have satisfied Breen & Froatz that it pays to advertise, and they are now contemplating issuing a regular half yearly announcement regarding special features of their business.

:o:

A Novelty in Window Advertising.

W. A. Harlow, of Washington C. H., Ohio, has made a great hit in window advertising. He has adopted the "Frog in Your Throat?" idea, and has succeeded in making a display which has caught the fancy of the public and elicited favorable newspaper comment. The following interesting description of the display is furnished by Mr. Harlow:

At the front of the window is a stream of water from whose mossy banks Mr. Bull Frog, with Music before him, directs by baton, a large chorus of frogs of all sizes in singing the praises of "Frog in Your Throat?" for coughs and colds; ten cents per package."

At the edge of the stream runs a road, where wagons are arriving, loaded down

Partnership Notice.

T. B. Breen, Ph. G. (N. Y.)

John G. Froatz, Ph. G. (N. Y.)

New York, November 18th, 1894.

I beg to inform my many friends and patrons among the general public and the medical profession that I have this day entered into a partnership agreement with Mr. John G. Froatz, Ph. G., and my pharmacy will in future be conducted under the firm name of Breen & Froatz.

This change has been necessitated by the demands of a constantly increasing business and I am confident that with the advantage and assistance thus gained, the requirements of a first-class pharmacy will be met more fully than ever; the increased facilities and recent improvements making ours one of the best equipped stores in the city.

In making this announcement I would take occasion to thank my friends and patrons for past support and to request the favor of their continued confidence and business custom.

Respectfully,

T. B. BREEN.

Two "Brownie" policemen are watching the busy scene, and to one of them is a frog telling "How it was."

Back of the road is the first defense wall of the "Brownie Castle." It is a splendid imitation of an old stone wall, and "Brownie" figures of all nations are peering over the top, watching two frogs with paste brushes post a bill advertising "Frog in Your Throat?" on the wall.

The idea is that in the "Brownie Castle" they have gathered from all nations to receive their instructions and stock with which to advertise "Frog in Your Throat?" all over the world.

The second wall of the castle is guarded by "Brownie" soldiers. Back of this wall on each side rise turrets, with look-outs. From every conceivable position "Brownies" can be seen, while on top of one turret a typical dude calmly surveys the scene.

From a rocky prominence rise the broad steps which lead to the door of the castle. In the center, and at the top landing,

stands Uncle Sam, while all the other nations gather on the steps to listen to his story of what an American firm has done for the world, by placing "Frog in Your Throat?" on the market.

The castle itself is a work of art. From rich glass windows a flood of light is thrown over the scene. Above the windows two owls are perched. The massive doors stand open, and "Brownies" of all sizes are coming and going.

The castle tower, overlooking the scene from the rear, is a clever piece of work, on whose dizzy height "Brownies" are to be seen. Perched at the top of all floats the stars and stripes.

Two frogs making a parachute descent attract the little ones, and keep them guessing where they come from.

The display was made in competition for a prize of \$1,000 offered by Hance Brothers & White, of Philadelphia, for the best window displays advertising "Frog in Your Throat?"

Drug Store Advertising.*

BY AN OBSERVING CUSTOMER.

The druggist should be among the most diligent of local advertisers. No retailer needs more the assistance of constant advertising or could hope for directer returns from it. He needs it because a large part of his wares are things that one can usually do without, however much, in their small way, they help to make life agreeable or wholesome. It is only for the bed-rock staples that consumers go hunting, and even as to these the seller that gets the greatest publicity will do the most business.

GOOD ADVERTISING.

Now, as to the consequences of good advertising in the case of a druggist. He has an almost infinite variety of medicinal, toilet and fancy products, not bulky for a purchaser to carry or to keep at home, and not calling for a large expenditure at a single purchase. These are generally things not made because of a public outcry for them, but because the makers believe that when the public gets acquainted with them it will buy and use them. Hence, they are just such articles as ought to be advertised, to bring them into notice and keep them there, and that being well done, there will be neither doubt nor difficulty in tracing the relation between advertisements and sales. This is one of the most gratifying experiences to an advertiser, the ability to discover the direct and immediate results of his advertising, and it is open to the druggist in a marked degree, because so much of his stock consists of things that minister to the convenience and comfort of life rather than to its prime necessities. Like the jeweler, he knows the difference between things that people must have and other things they ought to have, and will have when their interest in them is suitably awakened.

An important part of a druggist's stock consists of the so-called patent medicines. The proprietors of these spare neither pains nor money in stimulating a popular demand for them, but the retailer still has his part to perform in enlarging their use in his own field, and turning the demand in the direction of his own store.

The modern pharmacy is a pocket edition of the department store, having a multitudinous variety of things to sell, but in smaller parcels and values. None will dispute that, to the department store, persistent advertising is the breath of life. Stop the advertising, stop the issuing of newspapers, and the great store would sink beneath the burden of its accumulations. Is it too much to say that the department store is at once the creature and the dependent of a system of advertising as vast as itself?

THE DRUG STORE LIKE THE DEPARTMENT STORE.

In the same degree that the modern pharmacy resembles the department store in its constitution should it follow the methods of its bigger brother, and high up among these is the practice of systematic and forceful advertising. Resemblance, however, is not identity, but likeness with a difference. Hence, in the advertising work of a large drug store, what is wanted is not imitation of the advertisements of a department store, but assimilation to them. The druggist has his own public, with particular wants and dispositions to which he must cater, and which resorts often to his pharmacy from differ-

To Our Patrons.

In announcing our new partnership arrangement we would take occasion to call the special attention of our friends and patrons to the fact that

Our Prescription Department is supplied with the most carefully selected drugs and chemicals, all conforming to the pharmacopoeial standards of purity; and prescriptions are compounded with the greatest care by graduates in pharmacy only—thus assuring the highest quality of drugs and the most skillful methods of preparation. Our check system is a sure safeguard against mistakes.

While the highest possible efficiency has been sought for and gained in our prescription department, other departments have not been neglected.

Perfumery and Toilet Preparations.—Our stock of perfumery is selected with the utmost care, special attention being given to the requirements of discriminating purchasers. All the high class brands of perfumery are kept. Toilet preparations of all kinds are displayed in our show cases and inspection of our extensive assortment is freely invited.

Brushes.—This is a department which we take a special pride in, and we are confident that no finer line of brushes (including all the varieties—from a tooth brush to a bath brush), can be seen anywhere.

Patent Medicines.—We keep nearly every known variety and any not found in stock will be procured on the shortest notice.

Homœopathic Medicines are held in high estimation by a large portion of the public and we carry a full line of the leading makes—Boericke & Tafel, Humphreys' and Munyon's.

Soda and Mineral Waters.—We give our personal attention to the manufacture of soda flavors, which perhaps accounts for the fact that we do the largest business in soda water beverages in Harlem. A large stock of the favorite mineral waters is always kept on hand.

Confectionery in a drug store is expected to be of the finest quality and we endeavor to maintain a reputation for excellence and purity by keeping the best brands only—these include—Wallace & Co.'s, Huyler's and Suchard's.

Our Cigars come from the leading manufactories of Key West and Havana and special care is observed to maintain the quality.

BREEN & FROATZ,

DISPENSING CHEMISTS AND PHARMACISTS,

2300 SEVENTH AVENUE,

TELEPHONE NO. 644 X.

NEW YORK CITY.

Ask to see Breen's Antiseptic Vapor Inhaler.

Third page of announcement.

*Printer's Ink.

ent motives and in different moods from those which it throngs to the department store. The compounding of remedies, once the chief business of an apothecary, has become overshadowed by his trade in proprietary medicines and fancy articles. Still must he, however, keep a sharp eye upon the up-to-date physician who demands for his patient the purest elements,

Hands will chap and grime in these cold days. The following recipe may help your case:

B.

Pumice Soap 1 cake.
Zante Soap 1 bar.
Fowd. Borax 1 oz.
Hand Brush 1.
Nail Brush 1.
Water q. s.

M.

SIGNA.

WASH. Apply to the hands frequently.

Use Hay's Liquid Cold Cream.
We have all sorts of manicure goods.

H. H. HAY & SON,
Middle Street.

Designed by Edward A. Hay, Portland, Me.

the latest additions to the pharmacopœia, and the exactest proportions; also, upon the sick of the neighborhood, who, restored to health, will be thenceforth esteemed patrons of the miscellaneous departments of the pharmacy. Therefore should the prescription department be kept conspicuous, attractive and efficient, and by no means slighted in the system of advertising.

PATENT MEDICINE ADVERTISING.

In the department of ready-made medi-

A Coad id Your 'ed

Disappears quickly if you use a preparation put up by me called

Horehound Tar and Wild Cherry.

It will effectually stop that aggravating cough and is also a remedy for hoarseness, bronchitis, etc. A window will be devoted to cough remedies for a few days.

JAS. B. BLACK

DRUGGIST
and
STATIONER
133 Union Street

Specimen from Olean, N. Y.

cines the competing specifics are so numerous, and their alleged curative or alleviative properties so wide, that the best way to advertise that part of the business is to make, for a single adver-

tisement, a short selection of well-known preparations, saying some good and effective words for each of them. No two of these remedies should be in the same field of ailments, because that would breed uncertainty in the mind of a reader as to which to choose, and so impair the efficiency of the advertisement. A good advertiser will be able to cover the whole list of popular remedies within a suitable time, and without letting them get in each other's way.

A permissible and even desirable variation of the above scheme of advertising is to sometimes advertise the ailments in their seasons of prevalence, and invite the public to the pharmacy for one of the tried and approved specifics.

Some druggists make a specialty of

preparations put up by themselves. This may answer for those who, by judicious and sustained advertising and other aids to business, have gained a large and assured position in the retail world. But the majority of retailers could not put up proprietary preparations so cheaply and effectively as the manufacturers, nor compete with the popularity obtained for those specifics by extensive advertising.(?)

Space is left for only a word respecting the advertising of the toilet and fancy goods of a pharmacy. For this, the advertisements of the great department stores furnish the readiest and best models, remembering, of course, that they are speaking to hundreds in each line of attraction, where the largest pharmacy can hope only for tens of possible customers.



NEW YORK.

HALL & RUCKEL TO RETIRE.

After a successful career, extending over a period of fifty-one years, the drug firm of Hall & Ruckel, at No. 218 Greenwich street, will withdraw from the trade on the first of the year. The business has been sold to C. G. Bacon & Co., who will continue it at the same place, where William Henry Hall, who died last summer in Hungary, started with John Ruckel as his partner.

Mr. Ruckel ceased to be a member of the firm twenty-five years ago, and Mr. Hall, who was a famous figure in the commercial world for more than half a century, continued it till the day of his death.

In his will, disposing of an estate of great value, Mr. Hall directed that the business he had managed so profitably be wound up. This injunction, combined with the spirited competition and narrow margins for profit, led the two sons and two daughters, who have conducted the business since Mr. Hall's death, to wind it up at once.

The heirs of the estate will continue the manufacturing of proprietary articles, a branch added a few years ago.

The withdrawal of Hall & Ruckel leaves but three of the big old-time drug firms in the trade. They are McKesson & Robbins, Tarrant & Co., and Schieffelin & Co.

The building at No. 218 Greenwich street has been leased by C. G. Bacon & Co., wholesale druggists, 20 College Place. They will take possession on or about January 1st.

As noted above, Hall & Ruckel will retire from the business of crude drugs, and an option on their goods has been given to C. G. Bacon & Co.

COMMITTEES OF THE N. W. D. A.

President Thos. F. Main, of the National Wholesale Druggists' Association, has announced the following additional committees:

COMMITTEE ON DRUG MARKET.

Geo. L. Muth, chairman, Muth Bros. & Co., Baltimore, Md.; Charles F. Cutler, Cutler Bros. & Co., Boston, Mass.; James R. Owen, Lord, Owen & Co., Chicago, Ill.; E. C. Frisbie, Talcott, Frisbie & Co., Hartford, Conn.; G. R. Finlay, Finlay & Brunswick, New Orleans, La.; W. M. Mersereau, W. H. Schieffelin & Co., New York City; F. H. Sloan, Dodge & Olcott, New York City; Harry B. French, Smith, Kline & French Co., Philadelphia, Pa.; Wm. P. Reddington, Reddington & Co., San Francisco, Cal.; Fred. G. Meyer, Meyer Bros. Drug Co., St. Louis, Mo.

COMMITTEE ON PAINTS, OIL & GLASS.

H. D. Cutler, chairman, Cutler & Neilson Paint & Color Co., Kansas City, Mo.; Arthur M. Heath, Heath & Milligan Mfg. Co., Chicago, Ill.; H. A. Sherwin, Sherwin-Williams Co., Cleveland, O.; Geo. B. Kauffman, Kauffman Lattimer Co., Columbus, O.; Ford D. C. Hinchman, Detroit Varnish Co., Detroit, Mich.; Harvey W. Drake, Drake Bros., Milwaukee, Wis.; Lucien Brunswick, Finlay & Brunswick, New Orleans, La.; F. G. Elliott, John Lucas & Co., Philadelphia, Pa.; John W. Perkins, John W. Perkins & Co., Portland, Me.; Robert B. Chambers, Chambers, Calder & Co., Providence, R. I.; Chas. P. Noyes, Noyes Bros. & Cutler, St. Paul, Minn.; A. J. More, Hornick, Hess & More, Sioux City, Ia.

COMMITTEE ON CREDITS AND COLLECTIONS.

Alanson S. Brooks, Chairman, Williams, Davis, Brooks & Co., Detroit, Mich.; J. C. Fox, McPike & Fox, Atchison, Kan.; Reuben L. Richardson, Rust & Richardson Drug Co., Boston, Mass.; John T. Plummer, Morrison, Plummer & Co., Chicago, Ill.; Lucien B. Hall, Benton, Meyers & Co., Cleveland, O.; John N. Carey, Daniel Stewart & Co., Indianapolis, Ind.; J. M. Wood, Mansfield Drug Co., Memphis, Tenn.; John McKesson, McKesson & Robbins, New York City; E. E. Bruce, E. E. Bruce

& Co., Omaha, Neb.; Geo. K. Hopkins, Hopkins-Weller Drug Co., St. Louis, Mo.; T. F. Van Natta, Van Natta-Lynds Drug Co., St. Joseph, Mo.; J. S. Kinnan, Walding, Kinnan & Marvin, Toledo, O

COMMITTEE ON LEGISLATION.

Edward H. Hance, chairman, Philadelphia, Pa.; Horace W. Sharp, Philadelphia, Pa.; Horace Burroughs, Baltimore, Md.; B. T. Fairchild, New York city; Albert Plaut, New York city; H. H. Osgood, Norwich, Conn.; A. W. Clafin, Providence, R. I.; John A. Gilman, Boston, Mass.; Charles Cook, Portland, Me.; W. A. Robinson, Louisville, Ky.; R. V. Pierce, Buffalo, N. Y.; Leonard A. Lange, Chicago, Ill.; C. H. West, St. Louis, Mo.; Frank A. Faxon, Kansas City, Mo.; J. C. Fox, Atchison, Kan.; John B. Purcell, Richmond, Va.; Evan F. Lilly, Indianapolis, Ind.; P. P. Van Vliet, Memphis, Tenn.; Edward H. Cutler, St. Paul, Minn.; A. R. Olney, Clinton, Iowa; William P. Reddington, San Francisco, Cal.

GROWTH OF THE DRUG TRADE CLUB.

The following gentlemen have recently been admitted to membership in the Drug Trade Club: F. E. Dodge and F. H. Sloan, of Dodge & Olcott; Louis Dohme, of Sharp & Dohme; H. B. French, of Smith, Kline & French Co.; John Clay, of Parke, Davis & Co.; W. A. Hoover, of W. A. Hoover & Co., Denver, Col.; George J. Seabury, of Seabury & Johnson; C. W. Snow, of C. W. Snow & Co., Syracuse, N. Y.; W. B. Roberson, of Dodge & Olcott's Philadelphia branch; Clayton Rockhill, E. Marchi, Joseph Mathias, of James B. Horner; Frank Lawrence and H. A. Seigrist, of Rio Chemical Co., St. Louis, Mo.; Jos. Leeming, E. W. Seymour, of Connecticut Witch Hazel Co.; W. S. Boyden, of Herf & Frerichs, St. Louis, Mo.; E. M. Butler, of Smith & Butler; H. B. Gilpin, of Baltimore; Charles Hinchman, of T. W. Hinchman & Co., Detroit; F. S. Hubbard, of F. S. Hubbard & Son, Buffalo, N. Y.; Thomas P. Haley, of Peacock Chemical Company, St. Louis, Mo.; Charles West, of West & Jenney, Boston, Mass.; W. B. Warner, of Philadelphia; K. J. Walter, of Baltimore; E. E. Dickinson, of Essex County; F. S. Calhoun, of New Haven, Conn.; Charles Kilgore and H. C. Switzer.

THE INTERSTATE LEAGUE.

Prof. Luther F. Stevens has been appointed chairman of the committee of organization for Kings County. The appointment came through President A. M. Rontey, of the New York city branch, in the following letter:

"The resolution at our last meeting to 'accept as members of the New York branch of the Interstate Retail Druggists' League druggists from adjacent counties,' was a most important step in the direction of speedy and complete success; we should avail ourselves of its advantages at once, and Brooklyn together with the rest of Kings County and the towns of Queens and Richmond Counties brought into the League as swiftly as possible.

"To hasten that success I appoint you (if you will accept the appointment) chairman of the committee of organization for, and allot to you, the whole of Kings County and authorize you to divide that country into sections, as numerous and so apportioned as in your judgment may appear the most suitable for the accomplishment of your task, and to select from Brooklyn druggists such other members as you shall require to complete your committee and take charge of the different sections.

"You have full power to remove any member of your committee at any time that you believe such removal to be necessary for the good of the cause, to accept resignations of your committeemen, and appoint others to fill their place. Your committee is a standing committee.

"As there may not be enough members of the New York branch in Kings County (at present) to complete your committee you are advised that your receipt for the \$2.00 yearly dues given to any Kings County druggist in good standing, upon payment of that sum, shall constitute him a member at once of the New York city branch of the Interstate Retail Druggists' League. The same power is given to every member of your committee, and receipts so given shall be exchanged by our treasurer for regular tickets of membership. I recommend to you to seek to make members rather than spend time for mere signatures to the plan of the league.

"At our next meeting a supplementary committee to the committee of organization for New York city proper will be appointed, and the final effort made to induce all the signers of the League's petition to become in reality members of the New York branch. You can see the importance of this effort to complete organization and how much a solid aggregation of members from Brooklyn will strengthen the endeavor of that supplementary committee. The conditions in your city I take to be different from those existing here, and that your committee will be all-sufficient for the purposes of its creation."

Professor Stevens has accepted the appointment.

MINOR NOTES.

Henry K. Preston, who conducts a pharmacy at 116 Columbia street, Utica, N. Y., has recently opened a new store at 1001 Bleecker street. Mr. Preston becomes a Benedict next month.

L. E. Johnson, prescription clerk at McMillan's Pharmacy, was married to Miss Helena M. Pray of Elmira, October 10th. Mr. Johnson has many friends in Utica and is a favorite with the traveling profession, all of whom unite in wishing him success and prosperity.

The gas and electric fixtures of the new pharmacy recently opened by F. Haas at Thirty-ninth street and Fifth avenue, and by Wm. F. Krembs at 1125 Madison avenue, were furnished by F. McLewee & Son, the well known makers of illuminated mortar signs, of 25 Waverly Place, New York.

Charles T. Stewart, manager of Ray's drug store, was married, Nov. 7, to Miss Elesha O'Brien. Mr. Stewart says that now that we have good Republican times again, he is warranted in taking this step. Commercial travelers and friends of the groom will be served with cigars and Tangle foot (Mumm's) after Nov. 20th. This is no joke.

Rudolph H. Kellar, who is well-known in drug circles and who for the past six years has been connected with Steinfuhler's Pharmacy, purchased the entire stock of that establishment on Nov. 1. Mr. Kellar has been manager of the store for the past four years, and is a competent and painstaking druggist.

C. H. Bayard, the genial western representative of the I. Calvin Shafer Fruit Juice Co., is in the city on a visit to his old home. Mr. Bayard has never renounced his allegiance to Brooklyn as his home, although

since his return he heard himself and his wife announced one day when making a call as Mr. Bayard, of Chicago and Mrs. Bayard, of Brooklyn.

Chas. A. Mincho, formerly of the firm of C. A. Mincho & Co., 187 Myrtle avenue, Brooklyn, has returned from a short trip to Europe, and has entered business again at the Dan'l F. O'Connell store, 55 Whitehall street, which will be conducted under the firm name of The Mincho Drug Co. Mr. Mincho gained many new and interesting points in regard to fitting up and running a first-class drug store on his trip, and he intends carrying them out and having one of the most complete pharmacies in the city. He is a thorough business man in every sense of the word, and his friends feel assured of his success in his new undertaking.

J. C. Ubert, proprietor of Ubert's tar, boneset and honey, for the last 81 years proprietor and manager of the pharmacy at the junction of Lee and Division avenues and Clymer street, Brooklyn, has fitted up a model drug store at the opposite side of the square, which square, by the way, was named Ubert Square, after the pharmacist. The new pharmacy is elegantly fitted up in antique oak, with prettily designed metal ceiling and a very fine prescription department. The public are accommodated with a handsome writing desk and telephone in the front part of the store. The store was fitted up by Fisher Bros. Mr. Ubert has been in the drug business in all 41 years, and is the oldest druggist in his city.

Many say that the prettiest pharmacy in the State of New Jersey is the one located on the S. E. corner of George & Paterson Sts., New Brunswick, N. J., owned and managed by John H. Van Deusen. The store has a frontage of about 25 feet on one street and 57 feet on the other, and inside is fitted up with old ash. The fixtures and ornaments are most tastily arranged, and it is really a pleasure to view the magnificent cabinet work, which was put up by the cabinetmaker, George Rule, of New Brunswick. Mr. Van Deusen has been in business quite a number of years, and is well known in New Brunswick. In 1872 he started a store at Church and Nelson streets, which he sold in 1881. Before he selling he started a branch at Hiram and Dennis streets. He then started a store at George and Bayard streets, which he has carried on with success up to the present time. He now builds a four-story Philadelphia old gold brick house at the above site, the lower part of which he is running as a pharmacy.

William R. Cobb, a practical dispensing druggist, for many years manager of Benjamin Kent's "down town" store in Paterson, N. J., has opened a little gem of a drug store in the new Mitchell flats at the corner of Graham and Hamilton avenues, that city, and the store has been fitted up with such consummate taste that it is bound to be ornamental as well as useful to the handsome residential neighborhood in which it is located. Mr. Cobb has fitted up the store with cases and shelves in quartered oak. The cornices of these are handsomely hand carved in a design of festoons. The prescription counter is up to date in its fitting. In one corner of the case is a closet specially fitted up to contain the drugs that are poisonous and that require extra care in handling. These are kept entirely separate from the other drugs on the counter and as an extra precaution against mistakes when the door of this closet is opened an alarm is sounded which impresses on the mind of the dispenser the fact that he is handling dangerous drugs.

O. F. Fuller, of Fuller & Fuller, wholesale druggists, Chicago, was a visitor to New York last week.

John McKesson, Jr., of the firm of McKesson & Robbins, is reported as confined to his home from an attack of typhoid fever.

F. G. Meyer, New York representative of the Meyer Bros. Drug Co., has taken his departure for the West, where he will probably remain until after the holidays.

George Hughes, of Jacksonville has succeeded in forming a stock company under the name of the Geo. Hughes Drug Company. Mr. Hughes' pharmacy has stood as a landmark on the corner of Bay and Ocean streets, Jacksonville, for upwards of eighteen years. He is known to a large circle of friends in New York as the former proprietor of the St. Catherine Pharmacy at 58d street and Madison avenue.

Games of the Wholesale Drug Trade Bowling Association, rolled last Dec. 1, resulted as follows: First game—Lanman & Kemp, score, 718; Robinson & Son, 684. Second—Parke, Davis & Co., 759; Dodge & Olcott, 729. Third—Seabury & Johnson, 694; R. W. Robinson & Son, 662. Fourth—Dodge & Olcott, 726; Powers & Weightman, 607. Fifth—Lanman & Kemp, 724; Seabury & Johnson, 619. Sixth—Parke, Davis & Co., 645; Powers & Weightman, 594.

Oscar Leistner has just returned from a month's sojourn in Europe, where he visited all the larger cities of Germany in the interest of his firm. Mr. Leistner procured a number of new novelties for the American market and also perfected arrangements under which his firm will represent in this country the well known house of Handlagessellschaft Norris, Zahn & Co., of Berlin. These are probably the largest ealers in novelties and druggists' specialties in the whole of Europe, and in their enterprise resemble the American houses.

Abner S. Bender, of the Pittsburg drug brokerage firm of Bender & Smith, was a visitor to the city last week. He came on from Philadelphia where he was in attendance upon a meeting of the Grand Lodge of Free and Accepted Masons. Speaking of the business situation in Pittsburg and vicinity Mr. Bender expressed himself as well pleased with the future prospects. His firm are agents for Jas. A. Webb, New York, alcohol; Griswold Linseed Co., Warren, O., linseed oil, etc.; A. L. Webb & Co., Baltimore turpentine; and Rogers & Pyatt, New York, shellacs and varnishes. He spent Thursday, Friday and Saturday in New York.

The following item, intended for insertion in our New York News Notes, appeared by inadvertence in our last issue under the heading St. Louis: A small firm, comparatively almost unknown in the trade, has, by its methods of conducting business, aroused the suspicions of many wholesale druggists. It sends out of town for price lists, and when they arrive, forwards an order asking for a percentage off for immediate payment. The firm's standing is being constantly inquired about by these out-of-town firms, and it is thought peculiar that it never places orders in this city, even with firms that have exclusive control of special lines of goods. A number of years ago a man made thousands of dollars by using the same methods. He sold the goods and never paid the bills. He was arrested, but always escaped punishment by the help of a sharp lawyer.

REPORT OF THE COMMITTEE ON ANTITOXIN.

Drs. T. Mitchell Prudden, consulting physician to the Health Department in the Division of Pathology, Bacteriology and Disinfection, and Hermann M. Briggs, pathologist and director of the Bacteriological Laboratory, have submitted a report to the New York city toxin, in which they recommend that the Board undertake the manufacture of antitoxin. The report was approved.

The work of making the serum will now be vigorously prosecuted. A private citizen has placed \$30,000 at the disposal of the Health Department for this work, and the necessary animals and laboratory outfit will be secured. It is expected that a supply of serum will be had by New Years. The Willard Parker Hospital and the Hospital for Contagious Diseases, on North Brother Island will first be supplied with it. As its manufacture will involve a good deal of expense, it will be some time before it can be put on the market at a low price, though eventually it may become as cheap as vaccine virus.

THE NEW YORK HERALD FUND.

The New York Herald has opened a popular subscription to furnish supplies of the antitoxin to the poor, heading the list by a subscription of \$1,000.

:o:

NEW YORK STATE.

BUFFALO, Dec. 6.—There is a big change for the better in business. The pharmacists of Buffalo have waited long and patiently for the resumption of business, and now that the tidal wave is coming their way there is no longer any wailing or grumbling. The clerks and commercial men are all rejoicing over the change, the former will soon get the salary they got last May; the latter the big orders, or at least an order; something that has been few and far between for a long time past.

Stoddart Bros. have just issued a new catalogue of druggists' sundries and surgical instruments.

Von Scoter & West have just added to their store a handsome hot soda apparatus manufactured by C. C. Monan, of Olean, N. Y.

R. H. Maltby has purchased the pharmacy at 488 Connecticut street, recently owned by Wm. Coleman.

George Roger, for a number of years with the Wyeth Chemical Company of Rochester, now graces the store of W. S. O'Brien.

John Hepburn, a well known druggist of Flushing and a member of the New York State Pharmaceutical Association, was recently elected a trustee of the village of Flushing.

Hot soda dispensers report a nice sale on hot drinks. While the public have to be educated to it, when once the taste is formed the consumer is a regular patron for the season.

Buffalonians are rejoicing that they make a nice profit in proprietary medicines. While the druggists of Rochester are selling all stable patents at cost or a little below, they are making their profits of 38½ per cent.

Druggist John Harper, of Dunkirk, N. Y., is not in the bicycle business, although he has a very attractive window display of a bicycle, the framework, spokes, etc., being made of bottles of his Hoarhound Tar Balsam.

Erie County boasts of one of the best and strongest combinations in the United

States. The druggists all pull together, and have so far succeeded in barring out anything in shape of a cutter or mutual pharmacist.

The Edw. Dwyer drug store at 346 N. Division street, has been purchased by W. J. Thompson. Mr. Thompson was for a number of years prescription clerk at E. H. Beeman's pharmacy on Niagara street. He is remodeling the store and proposed having a first-class pharmacy.

Plin McArthur has added a handsome new cigar case to his store which is said to be the only one of the kind in the city. It is of ¼ in. plate glass put together with rivets of nickel. It is protected at the bottom by a six inch marble slab running completely round the case.

O. A. Colvin, who recently conducted a pharmacy in Rochester, N. Y., has purchased the Smith pharmacy in Elmira. He has invested in a Mathews hot soda apparatus and intends to run a full line of hot soda beverages. His pharmacy when completed will be one of the handsomest and best equipped establishments in Elmira.

H. J. Dimond, who conducts a pharmacy at 380 Connecticut street, is a strong friend of the lady pharmacist. The Dimond pharmacy is one of the best paying and equipped pharmacies on the north side. He carries a large stock of sundries and the lady in charge knows how to arrange systematically. This store has been running nearly 15 years and up to date has dispensed 69,552 prescriptions. For a suburban store we think Mr. Dimond has reason to throw bouquets at himself in view of his record.

A YARD OF PUPPIES.

The Rochester Union art supplement recently contained an excellent half-tone of eight puppies belonging to S. S. Seely, a well-known druggist who is very fond of dogs. Mr. Seely's dogs are a drawing card for his store, as they are widely known and very popular. One of them, a big Newfoundland weighing 200 pounds, recently adopted thirteen little chickens which had been deserted by their mother. The chickens follow the dog about and sleep in the warm nest made by his long woolly hair when he lies down. The group was exhibited at the Steuben County fair and attracted a great deal of attention. When "Puggles," one of Mr. Seely's favorite dogs, died in November, a touching tribute to his good qualities was printed in the Steuben Courier.

:o:

New Stores.

MASSACHUSETTS: A. W. Fairbanks, Ashburnham.—John K. Moulton, Springfield.

MICHIGAN: Ives & Owens, and A. J. Henry Drug Co., Traverse City.—G. W. Milligan, Bay City.—Northrup's drug store, Freeport.

RHODE ISLAND: McGunnagle Brothers, Pleasant View.—McNamara Brothers, Woonsocket.

CONNECTICUT: A. B. Norcross, Wallingford.

PENNSYLVANIA: The Doyle Medicine Co., Wilkes Barre.—J. W. Fleming, Norristown.

INDIANA: Otto G. Klinkenberg, Fort Wayne.

OHIO: J. W. Brant, Canton.

VERMONT: Frank Eaton, Vt.

MASSACHUSETTS.

Boston, Dec. 5.—Another figure prominent in drug circles has passed away, in the death of Dr. Horace L. Bowker, which occurred on the 21st of the month, as briefly recorded in our last issue. Dr. Bowker had been in poor health for some time, and suffered intense pain from heart trouble the last three weeks of his life.

DR. H. L. BOWKER'S DEATH.

He was born at Phillipston, Nov. 22, 1832, and received his early education

Boston Citizens' Association and also of the Boston Druggists' Association.

HIS PERSONALITY.

He was a man of peculiar and radical ideas. A daily paper comments editorially upon his character as follows:

"Few men have manifested more of the traits of a public-spirited citizen than the late Dr. Horace L. Bowker. He was intelligent, earnest, and unselfish in his efforts for the general good. He was a man of strong feelings, and he had an intense hatred of anything like corruption in public affairs.



DR. HORACE L. BOWKER.

in the district schools, later attending Westminster Academy. Early in life he became interested in chemistry and subsequently studied both chemistry and medicine. He began the practice of the latter science in Boston in 1861. He abandoned this calling three years later to engage in business as a manufacturing chemist in which he was successful, amassing a competency.

AS A PUBLIC OFFICIAL.

He served often in public capacities being first elected to the City Council for four successive years. Later he was nominated for the Senate, but declined, and ran for Representative, he was elected and re-elected, serving four terms in all. While in the Legislature he served as Chairman of the Committee on Public Health, with marked ability.

Of late years he has been a familiar figure in the lobby, and has wielded a powerful influence there, devoting his attention principally to matters pertaining to his profession.

He held the appointment of State Assayer for a long time and has served the city as Inspector of Vinegar. He was a prominent member of the South

He detested sham, and was in the strictest sense a plain, blunt man. He was disposed to be active when less courageous or more indolent men shrunk from interference. In this way he encountered opposition, and was sometimes misunderstood. His indefatigable industry was a marked trait in his character, and it was well matched by an indomitable persistence. He had enemies, and he gave no quarter in his controversies with them when he was convinced that they were in the wrong; but his purposes were good, and he had a kind and benevolent heart to those who needed comfort and sympathy. He was as true a friend as he was a dismissed by those who appreciated the misdeeds by those who appreciated the many good points which he illustrated in a useful life."

His family consists of a wife and four daughters. The funeral was held on Nov. 23, from his late residence; the body was interred at Forest Hills.

NO DRUGGISTS' LICENSES FOR TISBURY.

The town of Tisbury will have to go without a licensed druggist this year. Some time ago C. F. Lane applied to

the board of selectmen for a druggists' liquor license. The board declined to give him a license, giving as a reason that they did not think Mr. Lane a proper person to have one.

To-day, in the supreme court, Judge Morton was asked to issue a writ of mandamus compelling the board to grant a license, on the ground that the statute provides that at least one license of the sixth class shall be granted in each city or town.

The court dismissed the petition, on the ground that it had no jurisdiction to review the action of the selectmen in the premises, they being the sole judges of the fitness of applicants for licenses.

WINDOWS MUST BE KEPT CLEAR.

The druggists in the district covered by station 5 have within a few days received an order from the police which is a decided innovation. It is that they must observe the screen law the same as all dealers in the ardent, i.e., that windows must be free from objects which obstruct a view of the store from the street. Everything indicates that this order was issued by direction of the police board, and also that the chairman of that body has taken a personal interest in this question. At the time the order was given the chairman related an experience of his own on division 5 a few nights ago. He said that on the night in question he was passing through the district when he came to a drug store located on the corner of a street and an alleyway. He happened to stop in front of the store for a few moments, and during that time he heard the constant jingling of glasses and the loud talk of several men, and there was no doubt in his mind they were drinking and having a merry time. But according to the chairman the most aggravating part of the whole thing to him was the fact that an officer in full uniform was standing but a short distance from the back door, and probably could have heard the same noises that he did.

Recently several druggists on this division have had their places visited by liquor officers, and seizures and arrests have been made.

The system of inspection which is practiced is for an officer to walk into a store unannounced, go to the back shop or wherever he pleases. When nothing suspicious is found the officer generally explains why the call was made and also that such visits might be looked for frequently.

It seems probable that the screen order will be carried out in every part of the city. But the druggist really affected do not view the order with pleasure and it is a question, too, if it can be made to apply to drug stores. The screen law was passed solely to apply to saloons and while legally the law may be applicable to drug stores, it was not intended for that purpose and the attempt is hardly within the bounds of common sense.

A FOOT BALL ENTHUSIAST.

Rollin A. Wells and Capt. H. M. Gifford, formerly of Fair Haven, are the proprietors of a drug store at 145 Somerville avenue, Somerville. Neither are registered, but they employ Judson Wicker to superintend the prescription work. On the day of the foot ball game

at Springfield, Wells left the store with about \$50 of the firm's money for the purpose of coming to this city to make purchases. Since that time his partner has not seen him and for a time at least was anxious about him, and the disposition made of the cash. Later it was given out on good authority that Wells attended the foot ball game after which he joined in the Yale celebration. It is now said that when the excitement attendant upon his disappearance subsides, he will return.

A CLERGYMAN ATTACKS THE DRUGGISTS.

Thanksgiving day the ministers of Beverley met and denounced the police for not enforcing the liquor law. On the Sunday following one of their number followed it up with a sermon on "Our Respectable Rum Shops." He referred to the manner in which the druggists of the city were selling liquor, and said: "I believe the meanest and most detestable rumrunner in Beverley is the druggist who betrays public confidence and violates his license. There are druggists in Beverley who, with a \$1 license, are selling liquor indiscriminately, and they are violating the trust the public has imposed in them as honorable men. One druggist in this city made 3000 sales in three months. The police say they can get no evidence to convict. This is strange. If I should steal a pint of milk from a doorstep the police and selectmen would leave no stone unturned to bring me to account, but here is a worse crime, and not only in one shop, but half a dozen, and the authorities are powerless."

DR. WHITTEMORE'S DEATH ON THE "L" ROAD.

Dr. Francis S. Whittemore, who was recently killed by a railroad accident upon one of the elevated lines in New York, was at one time identified with the drug trade in this city. He was in born in Sandwich in 1864, and after attending the town schools worked in a local drug store, later he filled a similar position in the stores of T. Metcalf & Co., and the late Joseph T. Brown in this city. He was a registered pharmacist. Entering Harvard Medical School in 1887, he was graduated three years later. He was house officer at the City Hospital for one and a half years, and assistant physician at the South Boston Insane Asylum for six months. Afterwards he served as house officer at the Children's Hospital, and then was given a special clinic at that institution. He was highly successful with his specialty, children's diseases, and was popular with the medical profession. It is said that he was about to begin practice in or near New York.

MASSACHUSETTS NOTES.

C. A. French of Somerville, has sold his business to Eugene Levitan.

Bridge & Gannon have opened a new store in Gillon block, Milford.

William McShane is the new proprietor of G. E. Burnham's store at Edgeworth.

H. L. Wardle of Dedham, has just purchased a fine residence at Dedham Centre.

F. E. Dwinnell and Chancy Bros., of Lyndonville, Vt., have both lost their stores by fire.

C. P. Herrick's store at Tilton, N. H., was robbed of \$300 worth of goods on the night of Dec. 1.

William Grace has opened a new store in Cambridge, which will be under the management of Frank Page.

The stock of George W. Swett, 245 Washington street, has been damaged by the smoke from a recent fire.

Dr. G. B. Cochran of Hudson, is to open a new store in January or February. He is a recent purchaser of a Tufts fountain.

A. B. Norcross, Wallingford, Conn., is about to open a new store for which C. H. Bangs of this city is to manufacture the fixtures.

The Low Art Tile Co., has just closed a contract with Dairymple & Warner, of Albany, N. Y., for an elaborate, nine foot fountain.

James G. Baldwin, 295 Tremont street, has been arrested on the charge of violating the liquor law. He is said to have made a sale.

G. I. Gilcreas, 701 Broadway, South Boston, is remodeling his store, and incidentally has purchased a new fountain from the Low Art Tile Co.

John Remby, a long established Gloucester druggist is moving into a new store, in which he proposes to place a new Low Art Tile fountain.

James L. Houghton of Brockton, and his clerk Joseph A. Precourt, were recently fined \$100 each, for selling intoxicating liquors; both appealed.

The Doliber-Goodale Company, proprietors of Mellin's Food, presented every one of their employes with a fine turkey for his Thanksgiving dinner.

The stores of C. J. Dwyer & Co., and Rock & Co., Marlboro druggists, have been closed by the state board of pharmacy because they did not employ registered pharmacists.

The store of Joshua L. Schikes, 41 Leverett street, was robbed of \$41 worth of cigars and cigarettes recently. The police recovered the property and have now arrested the thieves.

L. M. Turner of Lowell, formerly of F. C. Goodale & Co., has purchased one of the branch stores of Ellingwood & Co. A fountain from the Low Art Tile Co., is to be a feature in this store.

Bartholomew McDonough, 536 Saratoga street, is alleged to have sold a half-pint of whiskey to a policeman a week ago Sunday. He was arrested a few minutes after the liquor was sold.

The November meeting of the Boston Druggists' Association was held on the 27ult., at Young's Hotel. There were no special features, the evening being spent in social intercourse. President Babcock was elected delegate to the Boston Associated Board of Trade for a term of three years.

An exhibit which is attracting much attention is that made by A. P. Preston, of Portsmouth, N. H., in one of the windows of Percival's City Hall drug store. It includes the famous smelling salts, tooth powders and other specialties, all put up in the attractive style for which Mr. Preston is famous.

Reeves Brothers, of Cambridge, are transacting a large wholesale business at the present time. It has been deemed necessary to enlarge the firm, in order to allow Mr. F. W. Reeves more time for work upon the road in the interest of their specialties, and with this point in view, Mr. Elliott Bright has been admitted to membership in the firm.

G. E. Crane, Haverhill, has moved into a new store at 62 Emerson street, which is described as one of the handsomest in that vicinity. It is 60 feet deep and 22 feet wide, and is fitted with all of the appurtenances of a first-class establishment. Mr. Crane has been very successful in his calling, and for some time he was the youngest druggist in the city owning his store.

James W. Tufts has recently supplied fountains to the following druggists: E. C. Bunker, New Bedford; C. P. Hussey and N. M. Lowney, both of Caribou, Me.; Carl C. Koheler, Manchester and Dr. J. S. Parker & Son, Farmington, both of N. H.; H. L. Stinson, East Deering, Me.; Alex. McGunnigle, Central Falls, R. I.; Loveland Bros., Binghamton; E. B. Austin, Boonville and C. A. Happen, Lowville, all of New York.

The case of L. E. Grischow against Edsom M. Roche, druggist, of South Deerfield, has been settled outside the court by the payment of a few hundred dollars, where a large sum was asked. Grischow called at Roche's store, found no one in, and went next door, where a relative of Roche was working, and asked him to go to the drug store and draw a glass of soda. The young man did so, and was told by Grischow to "put in some of that," pointing to a bottle. It proved to be aconite. Hence the suit.

Business during the last month was excellent with The Low Art Tile Co. F. G. Landry, St. Johnsbury, Vt., and A. O. Bradford, 358 Warren street, this city, bought cold fountains. Purchasers of hot fountains were H. L. Hadcock, 2700 Washington street; S. Meadows, 156 Dorchester avenue; A. O. Bradford, 358 Warren street and Edward F. Otis, 2388 Washington street, Boston. Other customers were F. P. Porterand and F. I. Pierson, Leominster; A. W. Bowker, Brookline; W. L. Davis, Worcester; Frank Emerson, Lawrence; M. C. Healey, New Bedford; J. J. Carroll, Peabody; Whipple & Mansfield, Salem; and R. E. Willard & Son, Pittsfield, all of Massachusetts. F. L. Lothrop, Providence, R. I.; E. K. Guenther, Portland, Me.; F. E. Baxter, Gardner, Me.; C. B. Woodman, Westbrook, Me.; William Miller, Montpelier, Vt.; and A. P. Fitch, Concord, N. H., were other buyers.

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A Lupulin Suit.

The case of Kirby & Burckett, dealers in crude drugs, at 24 Liberty street, New York, against the drug firm of C. H. Dietz & Co., will, it is said, be carried to a higher court.

Not long ago the firm of Kirby & Burckett brought suit against the other firm for \$517, which represented the value of about 1,200 pounds of lupulin sold the defendant about two years ago. The goods were sold on sample and delivered. The price was forty-five cents a pound.

The defendants refused to pay, claiming that the goods were not up to the sample submitted.

When the case was tried recently before a jury in the Supreme Court, Brooklyn, Mr. Dietz produced a sample which he swore was the one furnished by Kirby & Burckett. But the plaintiffs swore the sample was not the one which they furnished. It was also shown that immediately after the sale the market for lupulin went to pieces. The jury brought in a verdict for the plaintiffs.

CONNECTICUT.

New Haven, Dec. 6.—A drug clerk in Farley's pharmacy in Putnam came near causing the death of one of the customers by giving the wrong medicine. Mrs. William Jolie and her seventeen-year-old son Dona were taken down with a heavy cold, and a friend advised the use of mullein leaf syrup as a remedy. Accordingly two packages of what was supposed to be mullein leaf were purchased and in due time administered to the patients. Immediately after taking the syrup they became violently sick and Dr. Bourrett was summoned. He soon discovered he had a case of poisoning on hand and administered stimulants which brought the mother and son out of danger. Investigation of the medicine showed the herb to be henbane and not mullein leaves.

The purchaser, Mr. Cartier, father of Mrs. Jolie, said there was no label on either package cautioning against poison. Mr. Farley, the druggist, has promised to pay the doctor's bill and incidental expenses, which is satisfactory to the family and consequently no further action will be taken.

The Bristol branch of the Law and Order League has been endeavoring to induce the county commissioners not to grant J. D. Fitzpatrick, of Waterbury, a druggist's license. He contemplates opening a pharmacy in Bristol. The law and order people say that there are enough drug stores in Bristol now, and that they will fight against the granting of the license as hard as they know how. Mr. Fitzpatrick says he has just as good right to a license as the other druggists already located in Bristol and that he will get one despite the remonstrances of the league.

The druggists of Connecticut may be interested to learn the names of the present officers of the Pharmaceutical Society of this State. These are: James Duggan, Norwich, president; A. Felton Wood, New Haven, and C. P. Gladding, Hartford, vice-presidents; Lester H. Goodwin, treasurer; Frederick Wilcox, Waterbury, secretary; John M. Brown, Norwich, local secretary; A. F. Wood, New Haven, reporter.

The association was organized in 1876 and incorporated in 1889; annual meetings are held on the first Tuesday in February.

EXPERIENCE REQUISITE FOR REGISTRATION.

In answer to the question, "Is it necessary for a drug clerk to serve four years in a drug store before he can try the examination of the State Board of Pharmacy to become a full-fledged druggist?" the Hartford "Times" answers as follows: "Some States require that the candidate for pharmaceutical license shall have served in a store four years, but Connecticut law requires only three years of active service before the candidate can take the examination."

In Stamford there seems to be a slight epidemic of sore eyes. The local physicians report many patients suffering from inflammation of the eyes.

The disease, though disagreeable enough, does not seem to be serious and is probably brought on by colds.

Over in Derby, Ansonia and Birmingham, three towns practically one, and also in Waterbury, the merchants recently tried to induce each other to sign an agreement whereby they should cease to give presents with goods sold, they should not contribute as firms to church or society fairs or entertainments,

should not buy over two tickets to any entertainment and should not advertise save in local papers or by hand-bills, all programmes, etc., being discarded. The druggists of Ansonia were invited to join, but as the first one talked to refused to sign, the others also refused. In Waterbury it is believed that several of the druggists signed the agreement. The first time the strength of the merchants was tested was at a local fair given by the Church of Assumption.

Father Syncott sent out circular letters to the merchants, who in turn met the Father and explained why they had taken this step. The merchants explained that under the old system it cost from \$300 to \$500 yearly and that they felt they could not continue on account of the small profit in business during the present times. There the matter rested, the Father agreeing with them. But when the list of donors was published it was quite amusing to read between the names and discover the name of the firms who had signed the agreement as being the real donors. They did it in this way. A clerk in their store would make a gift to the fair as being his own personal contribution, but on the side he would let a few know that it was a present of the firm's through him. It was a clever piece of business on the part of some; and other firms who did not give directly or indirectly felt rather sore, and consequently the relations formerly harmonious between the different merchants are rather strained, and it looks as if the combination will go to pieces, and, as of old, each firm will look out for its own interest in the future. The druggists of these places were wishing for the success of the combination, as it would relieve them of a source of annoyance.

PASSING NOTES.

A new lighting system has been placed in Apothecaries Hall of Danbury.

Druggist David David of Danbury, who has been ill, has almost recovered.

A new drug store, of which A. B. Norcross is the proprietor, was opened in Wallingford, Dec. 1.

Fred Schilling, formerly a drug clerk in New Britain, is studying pharmacy in the Massachusetts College of Pharmacy in Boston.

The democratic candidate for mayor in Holyoke, was J. J. Curran. He is well known in Meriden, having owned a drug store in that city.

Charles Stanford of P. Herrity's drug store, in New Haven, took a prominent part in the circus recently given by the St. John's Catholic Club.

Several drug stores in Norwich have taken the agency for the Norwich "Bulletin" to take advertisements and subscriptions for that paper.

Druggist Lowry of East Hartford, has sold his little pacing mare to J. T. Starkwood of Putnam, on private terms. She is by Rocket and has a record of 2:42.

Frank Dunham, clerk in the pharmacy of F. D. Burtch & Co., of Southington, has secured a position in New Haven and left for his new place December 1.

Alfred E. Henley, formerly head clerk in the drug store of E. W. Thompson of New Britain has resigned his position and is about to enter the College of Physicians and Surgeons in New York.

Bernard Fahy, the very popular member of St. John's Catholic Club, of New Haven, and the efficient clerk in Dimock's drug store, recently took part in a burlesque circus given under the auspices of the club.

J. T. Wall, the druggist of Middletown, has a novel cuspidor in his store. It weighs about 25 pounds and is made of enameled iron and finished to look like a silk hat. While lying on the counter many people have been fooled in attempting to "try it on."

T. A. Fitzgerald will open a drug store in Bristol, at No. 12 Prospect street, in about a week. He formerly kept a pharmacy on the North Side, and is a capable and bright business man. He has not secured his license yet, but he sees no reason why he should not, as he was granted licenses at his former places.

A new brand of cigars is being introduced to druggists of Connecticut. They are said to be flavored with celery, and the theory is advanced that the well known action of celery on the nerves will counteract any ill effects that might be experienced by some people from the use of tobacco. The odor of the celery is not discernible after the cigar has been lighted.

Mason P. Gray, a druggist in Mystic, is experiencing considerable trouble in obtaining a license. There has been a petition in circulation for the last few weeks directed to the County Commissioners, soliciting the voters to remonstrate against the granting of a license to Mr. Mason. It is the same old story. This thing has been tried time and time again, but without success, as the commissioners have always overruled the remonstrance. But this year the petitioners might be successful, as Druggist Gray has recently settled in the criminal Court of Common Pleas a case against him for violation of the liquor law, and under the ruling of the Superior Court of Connecticut in a recent decision, this will prevent him from getting a license this year.

Centenary Firms.

Burnet Landreth, president of the Association of Centenary Firms and Corporations of the United States, has just issued a circular letter to the members stating that, since the association dinner at the Bellevue Hotel, on May 12, 1893, the membership of this unique society has been increased by the addition of the firms of P. Lorillard & Co., Thomas Williams, Jr., & Co., Coleman & Brock, E. Burd Grubb, W. H. Schieffelin & Co., and A. A. & J. J. Williams.

No doubt, he says, a few other firms are yet to be discovered and added to the membership of the association, possessing the rare and enviable distinction of 100 years' management by the same family. The Board of Stewards contemplate calling in January the seventh annual meeting and dinner, to be held at the Hotel Bellevue, and it is desirable that eligible centenarian firms join the association before that meeting.

Thirty-one firms now compose the association, of which 21 are located in Pennsylvania, four in New York, two in Massachusetts, two in Delaware, one in Maryland, and one in New Jersey.

The drug firms represented in its list of membership are: Francis Jordan &

Sons, chemicals, Philadelphia (established in 1778); Charles A. Heinitsch, retail druggists, Lancaster, Pa. (established in 1780); W. H. Schieffelin & Co., wholesale druggists, New York city (established in 1794).

Ray's drug store in Utica was established in 1791, three years before W. H. Schieffelin & Co., of New York city.

PENNSYLVANIA.

PHILADELPHIA, Dec. 5.—A local pharmacist recently remarked that the tax-free question is a "burning" one, yet his facetious way of putting it fairly expressed the interest which is being taken not only here, but all over the United States, in securing an enforcement of the provisions of the law passed to remove what everybody has for years considered an unjust burden. Chairman George M. Beringer, of the Philadelphia College of Pharmacy's Committee, has a heavy bundle of mail awaiting him every morning, which contains written replies to the circular letter sent to all druggists, asking their opinions on how the government can get results from the statute on its books. The need of an appropriation from Congress to enable the Secretary of the Treasury to look after the handling of tax-free alcohol is manifest, although all of the retailers are anxious that the expense incurred shall be as small as possible. Some think that honest collectors of internal revenue, and their deputies will be able to attend to the alcohol for use in the arts and medicine. Propositions involving increased work for these Federal office-holders are not hailed by them with marked enthusiasm.

THE QUESTION TO THE PHARMACIST.

The matter of how much profit was to be made on the legitimate sale of alcohol by the working pharmacist—whether in ten cent lots for cleaning purposes, or in gallons to the doctor whose office boy makes his tinctures—has been not one so much of gain as how to prevent loss. Now that there is a chance to largely reduce the price of alcoholic medicinal liquids, it is believed a more satisfactory rate can be made both for the pocket of the purchaser and the receipts of the dispenser. Prices will have a natural value instead of one of unjust inflation.

As in most other lines of business when the interests of retailers and wholesalers clash, or are made to clash by the hard drives for monopoly on the part of some, this tax free alcohol problem brings out charges of discrimination in favor of buyers of drugs who in consequence are lukewarm in supporting the movement now being directed by the members of the College of Pharmacy. The time when backbone is not needed in business affairs, to secure what is just, has not arrived.

STREET PARADES ABANDONED.

The students of the Philadelphia College of Pharmacy have abandoned the idea of having an annual parade on the city's streets. The opposition which was developed last year when quite a demonstration of pharmacists and physicians and dentists in embryo was made, was potential enough this fall to squelch those ambitious young men who were willing to march around the town cheering, waving flags and getting smirched with showers of sparks from fireworks. It is just as well—better, in fact. The dignity of the professions of medicine, pharmacy and dentistry was not enhanced by the annual parades. Many of the students found a vent for their pent-up feelings in the excitement of the Thanksgiving Day University of Pennsylvania Harvard foot-

ball game. The blue and white of the College of Pharmacy were waved whenever the red and blue of the 'Varsity were in the lead.

ZETA PHI OFFICERS.

The Zeta Phi Society of the college is passing through lively times these weeks, with the result in doubt. The cause of all the commotion is the approaching election of senior class officers. This list includes the commencement night, or more properly speaking, alumni night historian, prophet, orator and poet. Naturally, in a class of about 350, there is some competition. And the electioneering of the politicians crops out all over, in lecture-room and laboratory. It can't be helped. In another week the lucky ones will be chosen.

PROFESSOR BASTIN'S TALENT.

Professor Edson S. Bastin has the talent of illustrating his own articles on indigenous plants, a talent which has not been trained technically, but is delightfully accurate in producing sketches of plants familiar to the botanist who has roamed the hillsides hereabouts.

ANOTHER DEATH FROM TOOTH BRUSH BRISTLES.

Dr. George R. Fortiner, 517 Cooper street, died a strange death a few days ago. The story of the accident leading up to Dr. Fortiner's death is as follows: One day last March Dr. Fortiner was cleaning his teeth, when a bunch of bristles became detached from the brush and in an inspiratory movement were drawn into his throat. Dr. Fortiner's wife, herself a physician of wide practice, and his son, Bryon G., a successful dentist, supplemented their efforts to his in an attempt to dislodge the offending bristles. The Doctor suffered intensely, but gained little or no relief. All efforts to remove the obstacles were unsuccessful, the bristles apparently going further down into the passages of the throat. A Philadelphia specialist was at last consulted, and he succeeded in dislodging some of the bristles, and considerable relief was afforded the sufferer.

But as time passed, Dr. Fortiner's friends saw that the mishap had no doubt caused an injury that was beyond repair. He was subject to a persistent cough, and was never entirely free from a pain in the region of the lungs. During the summer he was at Ocean Grove, but the sea air seemed to do him no good. He was at intervals seized with spasms of coughing and strangulation so violent that members of his family had extreme difficulty in saving his life. All this weakened the Doctor and he became an easy prey to pneumonia, and when attacked rapidly succumbed. His physician said that while pneumonia was the actual cause of death, the bristles from the toothbrush formed the primary cause by setting up pulmonary inflammation, and that there was no doubt but that the bristles had passed into the bronchii, and perhaps had reached the lungs.

SHOEMAKER & BUSCH'S DEPARTURE.

Shoemaker & Busch, who recently bought out the Climax Confection Company, have been obliged to rent a portion of the building adjoining their store, 604 Arch street, for the manufacture of Borton's fruit tablets and other specialties. They are doing twice as much as they expected, and in a circular to the trade they say:

"We have succeeded to the business of The Borton Confection Company, as manufacturers of fruit tablets, and other specialties. Mr. Wm. Borton will continue in the employ of the new firm and the same process of manufacture will be continued."

COMPETITIVE WINDOW DISPLAYS.

There is considerable competition in this city over the competitive display of the various articles sent out by the manufacturers of "Frog in your throat?" and although it is not thought that any of our druggists here will be successful in securing the cash prize offered by the firm, they are nevertheless displaying considerable ingenuity in arranging the articles which goes to make up the display. Nearly all the windows have at least one frog in them, but a large number of the show windows are fairly aglow with the bright and nondescript articles which the firm has sent out. The old Apothecaries Union window on Arch street above Sixth is very attractive, and if any belated traveller should happen to go by it doing the wee hours when everybody is supposed to be sleeping, it is an assured thing that there will be an applicant before the magistrate early the next day to take the pledge. But with all this horror the various designs are an innovation, and in a great measure relieved the drug windows of the sameness with which they have been decorated for many years. It is said that a popular druggist in Brooklyn is in the lead for the prize, and that it is an almost assured thing that he will carry it off.

MUSSELMAN'S CAT.

D. G. E. Musselman, who is the proprietor of the well known and largely patronized drug store at the northeast corner of 20th and Parish streets, is contemplating a number of alterations to the store. While talking of cats in drug stores, Mr. Musselman has a whopper, who generally mingles with the customers, and when not doing this he is resting on the show case in close proximity to the cigars. It is not known whether Sir Thomas is a lover of the weed, but when one blows cigar smoke in his face, he opens his mouth, and enjoys a second hand smoke. Besides this, it is said the cat knows what drugs are poisonous, and it cannot be induced to go near those bottles.

LOOK OUT FOR THIS FIRM.

A number of the small manufacturers of proprietary goods have received inquiries and orders from a New York concern, whose name cannot be found in the mercantile books, and is without financial rating. The firm has printed order blanks, and the houses here are somewhat chary about sending goods. [An item concerning this firm intended for our New York news column, appeared through inadvertence under the St. Louis news letter in our last issue. Druggists would do well to exercise great caution in accepting wholesale orders from strange drug firms.—Ed.]

A POPULAR PERFUME.

Chapman & Rogers, manufacturers of Quentin's perfumes, Arch street, above Fifth, are having a big run on their Princess Bonnie extract. This perfume was brought out last year during a run of the popular opera in this city. Like its namesake it made a hit, and it became as much the rage as was Miss Mayo, the charming star of the Opera. The play is now on the road, and Messrs. Chapman & Rogers have a representative out with it. In Harrisburg recently he made quite a name for the perfume, and the daily papers gave it a good send off.

PHENACETINE SMUGGLER CAUGHT.

On December 4, William B. Pettingill, who resides at 1623 Vine street, was held by United States Commissioner Bell in \$1500 bail for a further hearing, to answer the charges of smuggling and at-

tempt to bribe three custom officials. Pettingill was arrested early in the morning by Deputy United States Marshal Meyers upon a warrant sworn out by special treasury agent John C. Gallen, in which it is set forth that Pettingill on or about November 25, 1894, introduced into the United States five one pound packages of phenacetine with intent to defraud the Government. To make sure of catching the culprit, Special Inspectors Johnson and Martin, with Special Treasury Agent Gallen, accompanied the deputy marshal to make the arrest, which was accomplished without much trouble. After Pettingill had been secured the customs officers made a search of the rooms, and there found the five packages of phenacetine.

At the hearing the prosecutor's testimony was that Pettingill came to this city from New York, and that a package that had been sent through the mails to Chicopee Falls, N. Y., was secured. It is believed by the officials that the prisoner was engaged in selling the drug for a party in North Adams, Mass. It was also brought out at the hearing that Pettingill had offered to give Special Inspector Martin \$50 or \$100 to let him off, and the offer was renewed before the hearing, besides this the accused it was said would not at first disclose to the officer the names of the parties by whom he is employed, but when at last he realized nothing would tempt the officers to abandon the prosecution, he then offered to reveal the names provided he was let go.

Phenacetine is worth about \$1 an ounce, and the duty is 20 cents. Some time ago there was a similar arrest made in this city, but the drug was secured in Buffalo.

SOLIDIFIED GAS.

It is said Professor Whitehall, expert chemist of the West Virginia University, who has been experimenting with natural gas from the oil and gas fields in the vicinity of the University, has at last succeeded in liquefying and solidifying the fluid. The result was a cube or block of stuff resembling frozen snow. It is extremely cold, so much so that when placed in contact with a mercury thermometer it froze the mercury to 125 degrees below zero. Touched by the hands or fingers it seems to burn like a red hot coal. Placed in contact with the open air, the stuff rapidly evaporates and disintegrates with a vapor or smoke, very much like the smoke from phosphorous.

LIVE TOPICS.

Dr. W. A. Burns, of Lancaster, was in this city recently laying in a supply of drugs, etc.

Dr. David F. Swisher, of Darby, who has had a young lady clerk in his drug store for several years, has now one of the sterner sex.

George W. Burk, Monroe P. Lind, and druggist E. C. Vogelbach spent Thanksgiving at Niagara Falls. Of course they had a good time.

On November 26, Sheriff Clements sold out the drug store of Bleeker & Hapley of Germantown. The store was bought in by one of the creditors.

John Reynolds, the popular druggist at Front and Norris streets, has his store always in apple-pie order, which brings him many customers, as the residents of this section of the city are noted for their cleanliness.

Dr. David Ross, of Susquehanna avenue and Belgrade street, is frequently seen in the business section of the city replenishing his stock.

Dr. F. H. Anderson, of Paschallville, has purchased the store and fixtures of Oswell Cook, at Seventy-second street, and Woodland avenue.

John B. Reynolds, Front and Morris streets, has returned from a successful week's gunning trip. Game was plenty and his bag was well filled.

On December 4, a meeting of the Trustees of the Philadelphia College of Pharmacy was held, at which considerable routine business was transacted.

William R. Warner & Co., have made quite a hit with their new liquorice and sugar coated lozenges. Their preparation of Pili Peristaltic is also being sold in large quantities.

Dr. F. C. Newbourn is confined to his house with stomach trouble. Mr. Newbourn is a drug broker, with office at 41 North Front street. He is well known and does a large business.

William Ferguson, who conducts and owns the drug store at the northwest corner of Frankford and Susquehanna avenues, is well known and is very popular, especially among the young folks.

G. A. A. Kuehn, of 257 Scott street, Wilkes Barre, Pa., was in town on a two weeks visit with his father, Rev. C. Kuehn. Mr. Kuehn visited many of his old friends in the business, and has made many purchases in the line of holiday goods.

William McIntyre is not only a druggist of fame, but his voice is often heard at the meetings of the Board of Education, of which body he is one of its active members. He has had his business establishment at the southeast corner of Frankford avenue and Adams street, for a number of years.

J. W. Neft, who has lately opened a new store at 1015 Columbia avenue, is one of the best known young druggists in this city. He is a great concoctor of temperance drinks, and while he was a clerk in the Continental Drug Store, under the Continental hotel he was kept busy manufacturing outlandish drinks.

Hance Bros. & White are contemplating adding one and one-half stories to their laboratory on Callowhill street. The building has a frontage of 58 feet, and a depth of 85 feet, and when the addition is added will be four stories high throughout, which will afford more space for the firm's growing business.

Isaac Cohen, the proprietor of the handsome drug store under the Reading Terminal at Twelfth and Market streets, has secured a good business in a short time. The store is now kept open all day and night, and to make it more convenient for his patrons he intends to have an entrance made on the Twelfth street side of the building.

The photograph of the Senior Class of the Philadelphia College of Pharmacy was taken on December 5. In former years there was always some difficulty in getting the whole class to assemble at one time, owing to the picture generally being taken at a point some distance from the college. This year the class assembled in front of the college on Tenth street, below Cherry, and besides all the professors were on hand to help ruin the photographer.

OHIO.

CINCINNATI, O., December 5, 1894.—Decidedly the news feature in local drug circles during the past fortnight was the case of the State against J. W. Vester, a clerk at Weatherhead's Pharmacy at Sixth and Vine streets, for the sale of unfermented grape juice containing salicylic acid. The first trial of the case before a jury resulted in the jury disagreeing, and the opposing counsel decided to leave the case to Squire Philip Winkler on the evidence brought out at the first trial of the case. The magistrate carefully examined the evidence adduced at the first hearing of the case and found the defendant guilty.

FINED \$300.

In fixing the fine of Vester, Squire Winkler stated that he was sorry he could not make the penalty less, but that the law would not permit such action. The minimum fine of \$300 and costs was assessed. The attorneys for the defense gave notice of appeal and the case will be fought to the bitter end in the Court of Common Pleas. Messrs. Outcalt, Granger and Hunt were the attorneys for the defense and Messrs. Dye and Dye for the State. Vester was arrested by Assistant Food and Dairy Commissioner Luebbing of this city. The testimony upon which the conviction was doubtless made was that of Chemists Fennel and Dickore. The former testified that he found .006 of one per cent. of salicylic acid in the grape juice, and the latter admitted that he discovered .004 of one per cent. of acid in the sample which was brought to him for analysis.

WHAT AN INTERVIEW RESULTED IN.

After the trial at which Vester was found guilty Druggist Weatherhead submitted to an interview with a representative of a morning paper in which he is said to have scored the officers of the Food and Dairy Commission and Professor Charles T. P. Fennel, who is the chemist of the commission in this city. Messrs. Luebbing and Fennel called on Dr. Weatherhead the following day and he denied having said what he was quoted as saying to the reporter. A retraction in the paper the day following was next in order. As Messrs. Fennel and Luebbing were very angry at what Dr. Weatherhead is alleged to have said it is likely that a libel suit would have resulted had there not been a retraction of the article published the day following. Squire Winkler was also very indignant, as the interview stated that the druggist had been given the maximum penalty of the law when on the contrary he had been fined the minimum fine. In the interview referred to the terms "shake down" and "capital prize" appeared. The interview caused no end of talk among the druggists.

When the case of the State against Bert Horsley, a clerk in the employ of Louis Heister, the pharmacist at Seventh and Elm streets, was called, it was evident that the trial would be a brief one. Messrs. Outcalt, Granger and Hunt were also the attorneys for the defense in this case. It required only a short time to hear the testimony after which the defendant was found guilty. The minimum fine was \$300 and costs was assessed. The arrest of Horsley was also caused by the officers of the Food and Dairy Commission. The defendant at first demanded a jury, but later waived that right and permitted Squire Winkler to decide the case. These cases have caused a great deal of talk throughout the State in liquor and drug circles, and the outcome in the upper courts will be watched with intense interest as the firms interested are

very wealthy. Millions of dollars are involved in the annual production of grape juices, and as salicylic acid is the best known of all preservatives, it will be hard to supplant it in the preparation of these products. Unfermented grape juice has had a large sale in this city for sacramental purposes. It was supposed to be non-alcoholic until Professor Fennel's analysis was published. This chemist alleges that he discovered about 15 per cent of alcohol in the juice brought to him for analyses. There have been representatives of the Eastern wine men here during the past two weeks, and from the preparations which they are alleged to have made, the fight in the Court of Common Pleas in the cases against Weatherhead and Heister will be battles royal.

FENNEL ON CLOVES.

Professor Charles T. P. Fennel and Attorney J. C. Harper came together the other day in Squire Winkler's Court in a case in which the purity of some cloves confiscated by the officers of the Food and Dairy Commission was the bone of contention. Professor Fennel was subjected to a rather rigid cross examination during which some articles about cloves in a number of trade papers were referred to. Professor Fennel claimed that the attorney was put up to ask him the questions referred to by George Merrell of the William S. Merrell Chemical Company. The tilt between the gentlemen was of a friendly nature, but it caused considerable talk in drug circles. The case was won by the State, however, and nothing more was said about it. According to analysis of Professor Fennel the cloves which the grocer sold contained only one-third of the essential oil which they should have had. No chemist was introduced by the defense.

STILL WARRING ON PASKOLA.

The war against the sale of Paskola is being continued in this city, as the officers of the Food and Dairy Commission have insisted it would be notwithstanding the exhaustive trial in Squire Tyrrell's Court a short time ago in which Milton Franken, a clerk in Wilnot Hall's store was found not guilty. The defendant in the present case is John Oesper, a clerk in the employ of M. C. Dow, the pharmacist at No. 552 West Fifth street. Oesper was arrested on the 3rd inst. on a warrant sworn out in Squire Winkler's Court by Assistant Food and Dairy Commissioner Luebbing charging him with selling Paskola under another name, to wit, glucose. Oesper was arraigned before the magistrate for a preliminary hearing and was released on bond. It is understood that the Pre-digested Food Company, which makes Paskola, will not pay the costs of any more law suits here. This will be unwelcome news to the local druggists who happen to be arrested in the future. It is said upon good authority that more arrests will follow of druggists charged with selling Paskola contrary to the laws of the State. The time of Oesper's trial has not been set yet and the outcome will be awaited with much interest.

ACTIVE CRUSADE BY THE FOOD COMMISSION.

A crusade which will be of much interest to druggists and liquor dealers is announced for the near future. A short time ago over one hundred samples of the various kinds of liquor found in market were confiscated by the officers of the Food and Dairy Commission and turned over to Professor Charles T. P. Fennel for analysis. This work has been completed and it is said that a large number of druggists, distillers and retail liquor dealers are to be arrested. Assistant Food and Dairy Commissioner

Luebbing is now in Columbus in conference with Dr. McNeal, the State Commissioner, in regard to proceeding against the above named tradesmen. Just who will be arrested is not known. It is known, however, that the liquor men have retained eminent counsel and have expressed their intention of fighting all cases brought against them to the bitter end. The distillers have unlimited capital and the prospect is good for a number of battles royal in a legal way.

KILLED BY EXPLODING PYROZONE.

A case of interest to druggists and doctors generally came up in this city during the past week. David D. Allen, a druggist of Central avenue, is awaiting trial for manslaughter on account of the manner in which he was drawn into a case in which a woman met an untimely death. It is more than likely, however, that the druggist, who has retained Messrs. Shay, Cogan, and Jackson will come out of the case all right. On the 1st of the month, Leaffa Clifton, a George street woman, went to Dr. C. S. Muscroft to get some medicine for an ulcer in her mouth. The physician prescribed pyrozone, a proprietary medicine made by McKesson & Robbins of New York. The prescription called for an original bottle of the stuff, and it was taken to Allen's store to be filled. A tube of pyrozone, said to have been a 5 per cent solution, was bought at John D. Park Sons & Co. by Allen and sent to the Clifton woman. The prescription did not state how the contents of the tube, which was hermetically sealed, were to be used. Miss Clifton had some trouble in getting the tube opened and she heated one end of it over a gas jet. An explosion occurred and the woman received burns which subsequently caused her death at the City Hospital. The doctor blames the druggist and the latter blames the physician. At any rate Allen was arrested for manslaughter, and his case is now pending in court.

IS THIS ACCORDING TO OHIO LAW?

A feature of the case was that Detective Witte went to Allen's store and forcibly took the prescription for the pyrozone, which caused the fatal accident. Druggists claim that the officer had no right whatever to go behind the prescription counter and take the prescription in question. In fact, he had no more right to do that than he had to go to the money drawer and take out a sum of money. This question has been decided in the courts time and again, and Witte's bondsmen may have to suffer for his action. After a prescription is filled it is said to be the property of the druggist. Dr. Muscroft, who prescribed the pyrozone, is one of the leading physicians of the city, and is the surgeon of several railroad companies.

OUR REPORTER'S NOTE BOOK.

The Mueller Pharmacy on Race street, near Sixth, has been treated to a coat of paint. The establishment has otherwise been renovated and now presents a nice appearance for the holidays.

Ed Voss, the pharmacist at Twelfth and Vine streets is one of the city's prominent dog fanciers who is in favor of a bench show; Harry Striethorst, his clerk, is also an advocate of such an exhibition, as he has read of the success of the horse show in New York.

Bernard Cahill, one of the rising young pharmacists of the city, is now behind the prescription counter at Rendigs Brothers' pharmacy in Walnut Hills. Mr. Cahill was for a number of years connected with Clayer's Pharmacy at Ninth and Elm streets.

The police are investigating the robbery of Wagner's Pharmacy at Seventh and Vine streets a short time ago. The thief or thieves effected an entrance through the cellar, and succeeded in carrying off about \$30 in money and a like amount of merchandise.

Johnny Bauer, the well-known pharmacist at Sycamore and Milton streets, is working on a new machine for the manufacture of tablets. The machine promises to be a big success and the popular inventor's friends are only too glad of the fact.

George Kylius, the popular druggist at Liberty and Denman streets, is the proud possessor of a trained cat. The feline is noted in the West End for its penchant for smelling nice odors. The other day the cat was found behind some bottles in the perfume case, which had been left open by the clerk.

M. L. Hawkins, the well-known pharmacist, at Twelfth and Elm streets, has just purchased a new soda fountain from the Lippincott factory. The sale was made by J. T. Harrison, the local representative of the above named firm. The fountain is too be of a new design, and will be a beauty in every sense of the word.

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MICHIGAN.

DETROIT, Dec. 5.—A. E. Ewing, attorney for the State Board of Pharmacy, has been making things lively for those who are in the habit of violating any of the various stipulations of the pharmacy law. His activity has dated from November 1, and since that time he has caused warrants to be issued for no less than a half dozen offenders. They were scattered throughout the State and nearly all of them were charged with selling drugs without having the proper certificate or none at all. Two were placed under arrest at Grand Rapids, and both clerks were fined \$10, which was paid. He says that he will get after all offenders with a sharp stick. Michigan law concerning pharmacy is strict enough, but the trouble is that it has not been properly enforced. The prevailing hard times has made the average druggist feel like cutting down expenses, and in many cases he has done so at the sacrifice of a good clerk for a poor one. The registered clerk who thus finds himself out of employment, goes into

COUNTER-PRESCRIBING IN MICHIGAN.

The periodical grumble against counter-prescribing is again being heard. This threadbare subject is brought forth with mouldy whiskers clinging to it to be discussed when the cut-rate problem has ceased to be interesting, or other subjects fail to attract attention. There is only one conclusion after the question has been discussed from stem to gudgeon, and that is that counter-prescribing is so deep seated that doctors and druggists will never wholly eliminate it. It is rooted in the selfishness of the public which is too penurious to go to a doctor. There is a demand for a corn plaster, a remedy for a skinned nose or a slight cold. Where does the individual go? He knows he can get it of the druggist for a slight expenditure, and that the physician will charge him a dollar or more. He goes to the former and demands to be satisfied, hence the reason for patent medicines and kindred concoctions. A piece of court plaster will cure a skinned nose for a nickel. Why spend a dollar for the same result. The physician cannot afford to do it so cheap, therefore it seems to be a legitimate function of the druggist. But

by aggressive counter-prescribing, the druggist certainly lays himself open to criticism. He is liable to work mischief to his customers, and at the same time is estranging the physician. A line of demarcation should be made. The druggist is a creature of the system and cannot be considered as its creator. Amateur prescribing, however, is to be condemned. There are not many of the trade in Detroit who are willing to set themselves up as an oracle on all things medical. But there are a great number who sort of pride themselves upon their knowledge of the effects of certain drugs upon the human system, and who dearly love to experiment a little just to see if their opinions or diagnoses are correct. The question of counter-prescribing is not bothering the druggist very much at present, but some of the doctors allege that there are more offenders than they care to see.

A DRUGGISTS' BOYCOTT.

The retail druggists of this city were recently stirred up over an advertisement which appeared in the Detroit Weekly, a commercial paper. The advertisement referred to was placed by one of the large jobbers and manufacturers of Detroit, and the objection lay in the fact that the current prices were printed. They held a meeting and passed resolutions condemning the dealer and agreed not to patronize him any more. In the same issue were the prices current of other lines of business such as hardware, dry goods, etc.; but these people paid no attention to it. It now appears that the drug jobber had placed a column "ad" in the paper, but was not responsible for the current prices, which were placed by the business manager of the paper. Upon learning this fact the retailers came off their high horse and now all is lovely again.

THE WAY OF THE CUTTER.

The retailers of this city are very touchy upon anything which in any way affects their business and "hands off" is the watchword. On the cut rate question they have been apparently successful in showing the originators of this style of business warfare that two can play at that game as well as one. Nearly every store in town has its little sign announcing cut rates, but those in the suburban districts are having a hard time of it trying to keep up with the procession started by down town dealers. Nearly every one of them whose sales amount to not over \$15 per day are inclined to haggle over the price of patent medicines. In almost every case the price is at least five cents higher. The fact of the matter is that they cannot keep up the cut-throat pace for any length of time without succumbing. There are evidences however of a partial let up in the direction of cutting the life out of prices. It is not a healthy thing for the business to get the public into the habit of expecting the earth.

A SILENT REVOLUTION.

A prominent pharmacist of this city made the assertion to the American Druggist correspondent the other day that he believed an evolution was going on in the drug trade all over the country. He said that the tendency was toward a concentration of the energies of the druggist on strictly one line and that is the prescription counter. He says the time will come when a customer will not expect to find everything in a pharmacy from a darning needle up to a shaving set. The dealing in com-

modities has become more of a habit than a necessity, but the elimination of this class of business will see a decrease in the number of stores. The great department stores are gradually assuming this function which has been exercised by the druggist for so long. This is more noticeable in the large centers of population. Even in Detroit there are several big stores which have a drug department next to their plush goods case, and a cigar counter adjoining those goods usually seen on the druggist's sundry list. There are many, however, who will take issue to the words of this prominent druggist, but they should get on to the signs of the times.

RECENT HAPPENINGS.

Northup's drug store is the name of a new firm at Freeport.

F. A. Merritt of Diamondville, has moved his stock of drugs into more commodious quarters.

F. N. Chappel, druggist at Charlevoix, has hired Ernest Pettis of Petoskey to help him in the store.

Fire recently did a slight damage to Steele's pharmacy at Ionia. It was extinguished without the aid of the fire department.

Robert Shaw of Port Huron, who recently purchased a drug stock at Brown City, has sold it again and returned to Port Huron.

The pharmacy department of the University of Michigan at present contains 74 students. The entire institution has 2680 on its rolls.

Arthur Bellows has given a chattel mortgage for \$617.39 to T. H. Hinchman & Sons, Detroit. He is a druggist at 264 Jefferson avenue, that city.

Torofsky & Levison have purchased the store formerly occupied by Fluegel the druggist at Adrian, Mich., and will convert the same into a clothing store.

Dr. M. L. Steel of Ionia, has opened a drug store in the Bayard Block of that city. He will have his office for the practice of medicine in the same building.

William Gallagher, the East End druggist at Saginaw, has sold his interests to D. E. Parall, of D. E. Parall & Company, Saginaw. He will conduct it as a branch store.

Vivian & Dodge have opened a brand new drug store at Calumet. The stock is very complete and the firm are said to have one of the finest pharmacies in the Upper Peninsula.

H. E. Grand-Girard of Grand Rapids, has accepted a position with P. Finch & Company of that city. Mr. Girard was formerly engaged in business for himself in Grand Rapids.

Burglars recently entered the drug store of Jessie Mains at Tekonsha, and robbed the till of \$40. Several other business places were also entered and goods of considerable value taken.

Ives & Owen of Belding, have decided to remove their drug business from that city to Traverse City. The goods are being packed up. They expect to shortly move their families there also.

The Hunter drug store at Sault Ste. Marie, was recently badly damaged by fire. It has been placed in condition again however, and Mr. Hunter went into his old location again December 1.

Messrs. Collins of Blissfield, recently purchased a two-thirds interest in the

drug store of John G. Wolf at Hillsdale. Last week Mr. Wolf bought it back and will continue as before the first sale.

G. W. Milligan will shortly open up a drug store on Washington avenue, Bay City. It was formerly occupied by The City Pharmacy. He was employed in the store as clerk and purchased the interests of his employers.

Arthur Mummery, the Ann Arbor druggist, recently lost his wife by death. She was married to Mr. Mummery three years ago when he was in business at Detroit. They moved to the university town about a year afterwards.

White & White of Grand Rapids, have purchased the drug store of Will Page on Plainfield avenue that city, and will conduct it as a branch store. This firm are proprietors of no less than three first class establishments in the second city.

News was recently received of the death of William H. Baker of Kansas City. He was for many years a respected druggist and business man at Whitehall and Montague. His remains were interred at his old home in Montague.

T. W. Davidson & Company have started a first class pharmacy at Bay City. It is located at 105 Center avenue. It is under the direct management of F. C. Loranger, formerly of Detroit. T. W. Davidson is a prominent lumberman of Lewiston.

J. Handy of Boyne City, has been in the drug business there for the last 20 years. He served all through the late war and came through with honors. He has been trying to get a pension ever since and his many friends will be glad to learn that he has at last succeeded.

Rumor has it that druggist George B. Howe of Monroe, is heir to a \$2,000,000 estate in England. It is also said that when the letter announcing his good fortune came, two cents postage was due. George reluctantly paid it, but his breath was taken away when he read the good news.

The drug store of H. M. Dean & Company at Niles, has been undergoing extensive repairs during the last two weeks in preparation for the holiday trade. The firm will stock it with the best and latest of druggist's sundries, and are looking for an excellent Christmas business.

R. Lewis, druggist at Dowagiac, was recently hit on the head by a heavy stick of wood thrown by a careless teamster who was unloading into Mr. Lewis' cellar. He was knocked senseless, but the physician who dressed his wounds says he will recover. If the blow had been a little more direct he would have been instantly killed.

The drug and confectionery stores at Pontiac have been closed the greater part of Sunday during the past three weeks. This was done so as to give their proprietors a chance to go to church and also to get acquainted with their families. The attempt has failed however, and now they are working as usual from ten to fifteen hours every day.

Ex-Alderman James Vernor of Detroit, is a prominent candidate for the office of game warden. He is making a strong push for the place and has every prospect of getting there. He entered the race a little late, but he made a good record

in the common council and has such a good standing with the trade throughout the state that an enormous influence will be brought to bear to have him appointed.

Herbert Hewitt, formerly in a drug store at Milford, has moved to Detroit, where he has obtained a petition in the establishment of Frederick Stearns & Company.

Frank Block, representing Charles Pfizer & Company, New York, and Harry Skillman, with the William S. Merrill Chemical Company, recently passed through the city looking for business.

The pharmacy class of '96 of the University of Michigan recently held a spirited election, at which the following officers were installed: President, Frank Parker; vice-president, J. M. Drew; secretary, G. M. Heath, and treasurer, U. S. Abbott.

The people of Quincy were recently shocked by the death of Henry C. Barnes, one of the most prominent business men in the community. He was 28 years old and had been engaged in the drug business for the last eight years. Although seriously ill on and off for a number of years he had persistently stuck to business. He leaves a wife.

The drug stock of H. A. Sorg & Company at Marine City, has been purchased by Messrs. Lang, Leitch & McElroy who will continue the business. Mr. Sorg's successors have also been appointed agents for the Western Union Telegraph Company and the Michigan Bell Telephone Company. Mr. Sorg will shortly retire from active business, but will help the young men in the store until they get their hand in.

ILLINOIS.

CHICAGO, Dec. 5.—The trade is enjoying the kind of boom which is always acceptable to any branch of business. It is not one of those spasmodic breaks that results in a general collapse after a short time and causes much more damage than it created good. For the past month there have been indications of an upward tendency in the staple market, and with the increase natural to the holidays, everybody is busy now in every direction. Comparison shows a favorable increase over last year, although this is nothing surprising in view of the fact that everybody was stocked up for the World's Fair and heavy stocks were not unusual at that time, while during the past summer, of course, the general depression compelled dealers to buy short and carry only what they were compelled to. There is no doubt the Chicago market felt this, especially during the time of the greatest strike known to this country, yet the reaction was sudden after the trouble settled and the tariff jugglery was through, and now every department in the big drug houses in this city is going it at full speed. Holiday trade is good in every direction, as it seems as though the people could now afford luxuries that a year ago were deemed too much. While some assignments are noticed and give rise to reports over which the croakers can gloat, it is a noticeable fact that new drug stores are starting up on all sides, and that the majority of establishments that go to the wall are those which attempted much more than conservatism would suggest.

COUNTER PRESCRIBING.

The State Board of Health is after the druggists who are suspected of giving counter-prescriptions, which is directly in violation of the law, and is considered a serious offense by the authorities. It does not, however, strike the average citizen, who is frequently dependent upon this means of relief, as such an awful crime, and it is very likely to become a difficult matter to secure a jury that will convict in such cases. An instance is shown in the case of Thaddeus Shoen, who conducts a drug store at 8753 Commercial avenue, South Chicago. This druggist was summoned to appear before a Justice of the Peace and answer to the charges of counter-prescribing, brought by the State Board of Health. Demanding a jury trial, the case came up a week later and resulted in acquittal. Other charges have been brought by the same complainants, yet it is stated that the department is not assuming any severe powers, but only brings prosecution on numerous complaints. Along this same line may be cited the fight on the retail druggists brought and backed up by the Liquor Dealers' Protective Association. These cases are all supposed to be found on strong evidence on the charge of selling liquor in small and retail quantities in violation of the pharmacy laws, but in nearly every instance the charge proves weak, the evidence is insufficient and the case is either dismissed or a non-suit is taken.

DRUGGISTS ORGANIZING FOR SELF-PROTECTION.

West Side druggists are organizing for the purpose of protecting themselves against what they claim to be a systematic scheme to extort money from them by prosecution along this line. It is claimed that constables armed with warrants against alleged offenders and violators of the dram shop laws offer freely on presentation of their writs the advice of adjustment, which is said to be represented as an easy way out of the whole thing. Some of the druggists claim that because they did not give up freely to the constables they were arrested time and time again. At a meeting held at the Sherman House on November 23rd, President T. V. Wooten, of the Retail Druggists' Association, occupied the chair. He outlined the position of the association very clearly in the following remarks:

"Those of you who have read the city papers of the last few days have a definite idea of the purpose for which this meeting is called. There are the very best reasons for believing that the warrants recently issued for members of the association on the West Side and the so-called trials of some of the cases were instigated for the purpose of extortion. The fact that in no case has a fine been demanded for violation of the law, and that in nearly, if not in all, the cases a settlement could be secured by the accused by merely paying the costs is as strong evidence as needed to prove that it is not the object of those prosecuting the case to enforce the law, but to secure court fees, presumably for division among themselves. The Retail Druggists' Association, be it understood, is not engaged in the business of defending violators of the law, but with the man who is trying to do a legitimate business and

to live up to the requirements of the law this association will go to the last ditch. If any members of this association are knowingly violating the liquor laws they have upon us no claims whatever, and so far from protecting such persons it is the duty of the association to assist in bringing them to justice."

The address of the president was followed by the introduction by W. W. Thumser of the following preamble and resolutions, which were adopted:

WHEREAS, Certain unknown and irresponsible parties have brought numerous and vexatious suits against members of the association for alleged violations of the liquor laws; and

WHEREAS, We believe that a conspiracy exists for the levying of blackmail on the druggists of this city, therefore be it

Resolved, That while this association condemns all violators of the liquor laws and wishes to shield no member who knowingly violates the laws, we unhesitatingly declare that no blackmail shall be allowed to be levied against any members of this association.

Resolved, That a committee of three be appointed to retain legal talent to defend all suits brought by those who have conspired to harass members by fictitious and vexatious suits.

President Wooten stated that he had been informed by officers of the Liquor Dealers' Protective Association had no hand in the prosecution, nor was it being made by the sanction of that body, but there were druggists in the meeting that immediately declared that witnesses who had appeared to prosecute or testify in the cases against them were in the employ of the Liquor Dealers' Association. It is doubtful if the druggists will go much further without knowing exactly what the law means.

CHINESE MEDICINE MEN.

The State Board of Health is overlooking no bets and a few days ago three Chinamen who represented themselves as physicians and had been practicing in Chicago for a long time were brought into court on the charge of practicing medicine without a license, at the instigation of the State Board. One of the accused appeared on the day set for trial, the other two remaining away, but a \$100 fine was entered in each case.

President Fritz Lueder, of the Illinois Pharmaceutical Association, has announced his committees as follows: Legislation—H. H. Green, Bloomington. Papers and Queries—W. K. Forsyth, Chicago. United States Pharmacopœia—C. S. N. Hallberg, Chicago. Trade Interests and Interstate League Affairs—Emil Thiele, Chicago; Thomas Kavanaugh, Peoria. On Adulteration—Joseph E. Huber, Peoria. Prize Essays—L. C. Hogan, Chicago; O. F. Fisher, Chicago; Oscar Oldberg, Chicago. Unofficial Formulas—J. W. Zindt, Chicago; C. F. Prickett, Centralia; H. W. Chamberlain, Alton. Board of Pharmacy Records—W. B. Boyd, Arcola; C. W. Watson, Greenville; L. C. Deck, Girard. Membership—F. H. Patterson, Chicago; Sam Coffinberry, Peoria; Charles Nadler, Peru; P. M. Post, Murphysboro; M. B. Travis, Saybrook; I. S. Frantz, Danville; C. H. Grube, Robinson. Apprenticeship—H. F. W. Spilner, Mansfield; J. H. Grace, Harrisburg. Deceased members—Frank Fleury, Springfield; J. E. Gruber, Chicago; Z. M. Coffey, Cairo. Charles Zimmerman, of Peoria, is a delegate to the American Pharmaceutical Association, and John Hechong a delegate to the National Wholesale Drug Association.

CHICAGO NOTES.

Early in the morning of November 27th, fire was discovered in the drug store of W. L. Samson, at the corner of

Paulina and Forty-third streets, and the flames from an unknown cause destroyed \$600 worth of property.

Cooper & McAfee, of Peterson, Iowa, have purchased an entire new stock of the Fuller & Fuller Company.

C. H. Low has bought for his new store at Menominee, Mich., what is considered one of the finest country stocks ever shipped out of Chicago.

L. M. Mills, of Grand Rapids, Mich., formerly with the Hazeltine Perkins Drug Company, has been engaged to travel for Morrisson, Plummer & Co., after January 1.

It is said in Chicago that the retail druggists of Wisconsin contemplate organizing for the purpose of operating a mutual insurance company. This is looked upon through long gauge glasses by druggists in Chicago.

On November 24th, Charles F. Foskett, who has been operating a rather swell drug store on Wabash avenue, was compelled to make an assignment choosing Edward C. Young as assignee. The assets and liabilities are estimated at \$25,000 each.

Joseph E. Shipley, of 1499 Washington Boulevard, died suddenly at his home on November 27th. He was an old citizen and one of the first druggists of Chicago, having been prominent in all public enterprises and never forgetting his profession. He was an old man and his death was ascribed to heart failure.

Among the recent visitors to the city were J. G. Van Meter, Belle Plaines, Ia.; A. W. Brayton, Mt. Morris, Ill.; F. J. Atwater, Manchester, Ia.; W. H. Pridoux, Mineral Point, Wis.; J. H. Goodloe, Shullsburg, Wis.; J. J. Shubert, Kankakee, Ill.; C. J. Landers, Marshalltown, Iowa, C. C. Reed; Lincoln, Ill.; Robert Mosser, Palatine, Ill.; J. F. Hocking, Crystal Falls, Mich.

Leopold Schwartz has been closed up at the corner of Northwestern avenue, and Potomac street, by his landlord, who presented an attachment on November 30th.

The Hoyne pharmacy has been opened at 525 North avenue, corner Hoyne avenue, by Mr. Norkin, formerly with E. J. Gagenheimer, of Blue Island avenue.

Storer & Britton have been compelled to give up, and on a judgment entered, Lord, Owen & Co., took possession on November 21st.

The Moxie prosecution, or persecution, whichever it might be called, may lose all its strength. As described in the American Druggist, prosecutions were entered against reputable druggists by these people on an alleged violation of contract or infringement. This could not be successful, as was predicted, and when the first cases were called they were promptly dismissed on the hearing of evidence, and in the others a non-suit was taken.

Morrisson, Plummer & Co., recently received an order from the War Department for 3,000 pounds of blue vitriol and 2,000 pounds of sulphuric acid for the Signal Office.

MISSOURI.

St. LOUIS, December 2.—The one subject of conversation among St. Louis druggists for the last few days is the grand success of the Drug Clerk's ball held at the Liederkranz hall on Thanksgiving eve. This was the grandest affair

ever given by St. Louis druggists. It really surprised everyone. There were nearly two hundred couples in attendance; and with scarcely an exception, all were in full dress. The hall was elegantly decorated with palms and flowers, and an orchestra composed of twenty-five of the best musicians in the city filled the grand ball room with the echoes of Strauss and other favorite composers. The grand march was led by that sturdy old pharmacist C. F. G. Meyer, president of the Meyer Bros. Drug Co., accompanied by his handsome spouse. After the grand march President S. E. Barber, in behalf of the society, extended a hearty welcome to the guests and also thanked them for honoring the occasion with their presence. Promptly at twelve o'clock the supper march was played and the happy druggists fell in line and marched down to the banquet hall, where they gained strength to last them until the wee tiny hours of the morn. All the members of the different committees are certainly deserving of much credit for the way in which they performed their duties; and special credit is due Mr. R. S. Vitt of the Floor Committee who, with a powerful memory for proper names, an extensive acquaintance throughout the city, and a peculiar knack for bringing the unacquainted together, devoted his whole time and energy to the exercise of this last happy faculty, much to the enjoyment of all present.

THE OMEGA PHI SOCIETY.

of the St. Louis College of Pharmacy, a booming little organization composed of senior students, had its origin back in the year 1885, on the 16th day of November. It is nothing more nor less than a quiz society, well organized and well managed. At the beginning of each college year they organize and elect a president, vice-president, secretary, treasurer, sergeant-at-arms, and a council composed of seven members. They meet one evening a week and hold a quiz on the work done in the laboratories and passed over in the lectures during the past week. A special quiz master is appointed for each branch and he serves for one night only. The duty of the council is to make all arrangements, on behalf of the graduating class, for the commencement exercises. The Society has a very appropriate gold pin, which is sometimes slightly modified to suit the fancies of the different classes. At the first meeting night in December the members elect their veiledictorian, and as this will take place at their next meeting, there are a number of anxious seniors, as it is considered quite an honor to be chosen to fill this place. At a recent meeting of the Society a committee of three was appointed to submit a "college yell," but as this does not seem to be a very popular move, it is quite likely the whole thing will be ruled out at the next meeting.

NEW MOVE BY THE WHOLESALE.

The retail druggists throughout the city have just received notices that hereafter the wholesale houses will deliver goods every day. This is quite a significant notice. It will be remembered that a few months ago the wholesale drug houses in this city combined for, as the retailers said at the time, the purpose of running things to suit themselves regardless of the retailer. While their object was not quite as bad as this, they did succeed in establishing a uniform price, for the wholesale trade, would only deliver goods

twice a week without extra charge, and established various other rules to further their individual interests. The retail druggists had not forgotten that when they combined against the "cutter" the wholesale firms gave them little or no encouragement or aid and finally when the retail league was broken, the wholesalers were among the most jubilant. When this wholesale league was formed the retailers decided to try to get even and so a large number of our most prominent druggists have been buying nearly all their stock outside of St. Louis.

THE TRADE LEAVING ST. LOUIS.

One firm in New York city has taken thousands of dollars from our wholesale houses in the last few months. One of our most prominent druggists informed your correspondent a few days ago that he had not bought over one-tenth of his goods in this city since this wholesale combine. It looks as though the combine was broken, and the retailers are chuckling to themselves.

PROF. HEMM TO THE FRONT.

The citizens of South St. Louis were very much shocked a few days ago to learn that a soap factory was likely to be erected in their midst. The owners of a factory which was condemned as a nuisance and removed from up near the center of the city have been trying to get a permit to erect their plant near where the South St. Louis Sanitary Works now stand, and had it not been for the earnest protest of a large indignant delegation of citizens from that end of town, headed by their old leader of the "stink factory" fight, Prof. Francis Hemm—the company would probably have succeeded in getting their permit.

WINDOW DECORATION.

Your correspondent in making his rounds of the drug stores during the past two weeks took special notice of the show windows to see what class of preparations, if any, the druggists were pushing forward; and in nearly every instance we found the front window glass decorated with the names of various patent preparations on which the druggist makes scarcely a cent. In many instances the windows were piled full of these preparations. There are scarcely a half dozen drug store windows in the whole city without lettering of some kind on them.

We found one exception to this rule however, when we struck that large brick building bearing the sign Drug Store, located near 3900 South Broadway. There was not a letter to be seen on the large glass front, but the windows were artistically decorated with large jars of crude drugs, of a quality seldom seen in this city, with a background of tropical plants. This store is owned by a well known college professor, and he informed us that he had just received his stock of winter crude drugs from a well known New York firm and was showing them to the public before converting them into pharmaceutical preparations.

THE NEWS.

O. B. Strube of the Pools' pharmacy has resigned his position as head clerk. L. F. Waibel has moved his drug store from 7600 S. Michigan avenue, to Broadway and Nagle street.

C. Shroeder, at Fourteenth and Market streets, is recovering from a long siege of sickness. He has been confined to his bed for several weeks.

Congratulations are in order with Mr. William D. Temm, proprietor of the drug store at Grand and North Market streets. His wife has presented him with a son and heir.

News items have been very scarce among St. Louis druggists for the past two weeks. They all say business is "rushing past the door," and we found any amount of them "sick of the drug business." Very few of the druggists expect to handle any holiday goods.

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THE COCKROACH.

1. The systematic name of cockroach is *Blattella germanica*.
2. Class: Always at the head and A L.
3. Order: It has none, and won't be ordered.
4. Habitat: Under sink and under cupboard and any available place where it can't be caught.
5. Therapeutic uses: In older times it was used as a secretion by intelligent quacks, but today it makes the mixture under a nice piece of Portuguese steak.
6. Description: It needs none, everyone knows it.

THE TICKET.

1. Systematic name of tick is a *hemiptera*.
2. Habitat: Forest path.
3. The egg is usually of the albuminous nature, but the tick is often different, where the hen has been confined in a box.
4. Proportions: If it comes from the market or farm they are usually small.

MUSK.

As to musk, we have a man down at the pond, who came from Jersey, that knows more about it than most druggists.

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[Chicago Tribune.]

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He smiled a ghastly smile and replied in an undertone.

Then she stepped up to the counter again, handed back the little bottle of perfumery, and nobody in the drug store spoke a word for five minutes.

Who says all the misery in this world is confined to the tenement houses?



John E. Osborn,
Governor-Elect of Wyoming.

John E. Osborn, the newly elected governor of Wyoming, whose likeness accompanies this sketch, was formerly a druggist and is a graduated physician. He was born in Westport, Essex County, N. Y., on June 19, 1858, and there he lived until he was fifteen years of age, when he apprenticed himself to a druggist in the neighboring State of Vermont. He later studied medicine and attended medical lectures at the University of Vermont during the winter months, working during the summer months in a drug store to pay his college expenses. He graduated with honors in 1880 and immediately pushed for the far west, where by his untiring efforts he has accumulated a fortune and has long been known as an enterprising public spirited citizen of honorable impulses and of sterling integrity.

Upon arriving in the then Territory of Wyoming he went to the town of Rawlins and opened a drug store, finding in a good business and establishing a reputa-

tion as a physician that placed him in the front rank of his profession.

A Vast Undertaking.

After five years of labor, with the help of 247 editors, and the enormous expenditure of nearly one million dollars, the Funk & Wagnalls Company announce that the last page of the second, the concluding, volume of the new Standard Dictionary, is now in type. This volume will soon be ready for delivery. The sales of the new dictionary are phenomenal. The publishers have a mathematician who has figured out that if the copies required to fill the advance orders were laid one on top of the other, the stack would be over three miles high, and laid end to end would make a path over fifteen miles in length.

Where Purity Counts.

When the physician or the public go to the pharmacist for liquor, it is because the pharmacist is expected to furnish a pure

and reliable article. That is also the reason why G. W. Meredith & Co., of East Liverpool, O., go to the drug trade to sell their Meredith's Diamond Club Pure Rye Whiskey. The discerning pharmacist will not disappoint either Messrs. Meredith & Co., or his customers, for he will purchase Meredith's Diamond Club Pure Rye Whiskey from the one and sell it to the other, to the mutual benefit of all three parties to the transaction. This whiskey is distilled especially for medicinal purposes, and the use to which it is to be put is carefully kept in mind throughout the whole process of aging and bottling the liquor.

It is put up in China jugs, as illustrated herewith, each holding one quart, and is also put up in pint and in quart bottles, one of which is also illustrated. This whiskey is sold by a large number of the best wholesale and retail pharmacists, among the former being the following, through whom supplies may be ordered: West & Jenney, Boston, Mass.; Strong, Cobb & Co., Cleveland, O.; Benson, Myers & Co., Cleveland, O.; Walting, Kinman & Martin, Toledo, O.; Farrand, Williams & Clark, Detroit, Mich.; Kaufman-Latimer Co., Columbus, O.; Orr, Brown & Price, Columbus, O.; Bailey Drug Co., Zanesville, O.; Ball-Warfield Co., Ironton, O.; John D. Park's Sons Co., Cincinnati, O.; A. C. Henderson Drug Co., Pittsburgh, Pa.; Wm. Smith & Co., York, Pa.; Smith, Kline & French Co., Philadelphia, Pa.; Morrison, Plummer & Co., Chicago, Ill.; Fuller Fuller Drug Co., Chicago, Ill.; Lord Owen & Co., Chicago, Ill.; F. S. Hubbard & Co., Buffalo, N. Y.; J. S. Merrill Drug Co., St. Louis, Mo.; Indianapolis Drug Co., Indianapolis, Ind.; Daniel Stewart, Indianapolis, Ind.; Standard Drug Co., Cincinnati, O.; Wheeling Drug Co., Wheeling, W. Va.; Geo. L. Quinn & Co., Providence, R. I.; Smith, Bennett & Co., Boston, Mass.; McKesson & Robbins, New York.



A Railroad Doctor's Prescription.

General Western Agent C. K. Wilber of the Lake Shore and Michigan Southern Railroad, with headquarters at Chicago, is, without trying, one of the really funny men of the railroad world. The other day, for example, he accomplished this advertisement, which old hands at the business truly say is one of the brightest little things ever put on paper:

B

The Lake Shore Limited regularly on your Eastern trips to prevent that tired feeling so often experienced by travelers.
Leaves Chicago, V. XXX P. M.
Arrives New York, VI XXX P. M.

C. K. WILBER,
W. P. A.

Can be taken without shaking.

General Passenger Agent Daniels says that Dr. Wilber's prescription is equally efficacious on trains of the New York Central, he having this assurance from Drs. Cosby and Dumond, who have tried it, with perfect success.

General Passenger Agent Fee of the Northern Pacific, has offered to all his local agents and subordinates a handsome prize in money for the best advertisement of the line, and it is obviously well for them that Mr. Wilber "isn't in it."—From the *Brooklyn Standard Union*.

:o:

Notes on Prices.**Tablet Triturates Reduced.**

Still the mill goes on grinding in the reduction of prices on tablets. One by one all of the manufacturers are wheeling into line, and now only one or two of the most conservative maintain their old prices. This sudden development of competition has brought out prices which were undreamed of last year. For an example of what one of the leaders in this movement is doing, we would refer to the advertisement on another page of Billings, Clapp & Co., who are making a specialty of the "bulk" business in tablets, and evidently intend to quote prices on standards which cannot be beaten. They write us that they are selling soda mint and chlorate potash tablets in kegs at a still lower figure, and that they intend to lead in this branch of the business. Write them for quotations.

Change of Price in Ridge's Food

Woolrich & Co., Palmer, Mass., announce special prices on gross lots of Ridge's Food in the following circular in which they invite dealers to make up orders for one gross of any size, sending checks at rates below, less 20 per cent. and the goods will be delivered, all charges prepaid:

No.	size	per doz.	list	\$2.80	Retails	.35
1	"	"	"	5.70	"	.65
2	"	"	"	10.00	"	1.25
3	"	"	"	14.00	"	1.75

They offer to send an assortment of printed matter free to any druggist on application.

Wholesale Druggists' Prices.

We note below the important changes which have taken place during the interval, in the prices at which retailers usually purchase goods in ordinary lots, from wholesale druggists:

ACID, OXALIC, has declined from 10@18c. to 9@12c.

ALCOHOL is now quoted \$3.40@2.85 and Cologne \$3.60@2.75, a decline of 2 cents.

ANISE, STAR, has declined from 33@88c. to 25@80c.

ANODYNE, HOFFMAN'S, has advanced from 54@57c. to 55@60c.

BALSAM, PERU, is lower, owing to arrivals, and is now quoted \$1.75@2.09.

BARK, CASSIA, is higher, and we are now quoted 8½@10c.

BEAN, TONKA, is in better supply and prices have declined from \$2.00@2.25 to \$1.75@2.00.

BERRIES, CUBEB, have declined from 25@30c. to 20@25c., and powdered from 85@40c. to 30@35c.

CALCIUM HYPOPHOSPHITE, has advanced from \$1.30@1.45 to \$1.40@1.50, and Phosphate is lower at 18@22c.

CAMPHOR is weaker and prices have receded from 42@47c to 38@45c.

COBALT, powdered, is now quoted 18@21c.

COCAINE HYDROCHLORIDE, has advanced from \$5.70 @ 5.95 to \$6 @ 6.25, and ALKALOID from \$6.50 @ 6.70 to \$6.75 @ 6.95.

CODEINE has declined from \$6 @ 6.25, to \$5.70 @ 5.95 and SULPHATE from \$4.30 @ 4.40 to \$3.85 @ 4.05.

DRAGON'S BLOOD is scarcer and prices are higher, \$1.10 @ 1.25 being now asked.

ERGOT, Spanish, has declined from 80@85c to 25@30c.

KOLA NUT is easier and in better demand 40@50c.

COD LIVER OIL, Norwegian, has declined from \$1.25 @ 1.50 to \$1.10 @ 1.25.

SEED, Anise, has declined from 35@40c to 25@30c.

TANNIGEN, a new addition to the list, is quoted 75c per oz.

CELERY has declined from 20@25c to 15@20c.

WAX, CARNARUBA, has advanced from 24@30c to 30@35c.

:o:

Review of the Wholesale Market.

NEW YORK, Dec. 10, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

There has been no special activity in the market during the past two weeks. The receipt of jobbing orders is fairly up to the average, though considerable caution is yet displayed by buyers, the rule being to confine operations to immediate requirements only. Speculation is limited and of a very tame character; and the low prices prevailing do not serve to stimulate, or in other ways influence the demand. Regarding prices the tendency upon general goods is to greater firmness, and the market is steady in tone with few changes of interest to report. Opium has advanced in the interval and is tending higher. Quinine continues firm. Oil of peppermint is easier. Caffeine has declined. Cocaine is higher. Haarlem oil is lower. Other changes of note are tabulated below as follows:

ADVANCED. DECLINED.

Bayberry bark. Oil peppermint.
Opium. Bleached coriander seed.
Refined saltpetre. Caffeine.
Jamaica ginger. Ginseng root.
Gum benzoin. Canada balsam.
Oil bergamot. Haarlem oil.
Oil bitter almond. Oil lavender.
Powdered fennel. Gentian root.
greek. Menthol.
Gum kino. Citric acid.
Cocaine.

ALCOHOL does not vary from the previous range of \$2.85 @ 2.40 for grain and 70 cents for wood; Alcoholene is firm at \$1.85.

BALSAM COPAIBA has been in fair request and among other transactions we note sales of 21 kegs at 38 cents.

BALSAM FIR, Canada, continues to offer at \$2.45 @ 2.50 in barrels and \$2.60 in cans; can lots constitute the bulk of business.

BALSAM PERU continues held at \$1.60 @ 1.75. The inside price can be shaded upon a firm bid.

BALSAM TOLU is firmer and the general asking price for the small available supply of prime is 80 cents.

BARKS.—Bayberry is exceedingly scarce and the price in consequence has been advanced to 4½@5c. Buckthorn is in demand with sales of 2,000 lbs. at 6 cents.

BELLADONNA LEAVES are cabled firmer abroad with 10½ cents quoted as the lay down price of prime quality.

CAFFEINE is in better supply and the tone of the market is easier with stock offered at \$6.80 @ 7.00.

COD LIVER OIL, Norwegian, continues in moderate jobbing demand and values are firm at the range of \$28.00 @ 30.00.

CASSIA BUDS are held and selling at 19 cents. The stock is somewhat limited and said to be under good control.

COCA LEAVES continue in light supply and the price is well sustained at 20 @ 22c. for Truxillo, and 30 @ 32c. for Huanuco.

CUTTLE BONE, Trieste, is in steady moderate request, with business at 8½ @ 8¾c.

COCAINE MURIATE has been advanced by the various foreign and domestic manufacturers 25c. per ounce. The new quotations are for lots of 100 ounces \$5.25, ounce vials, \$5.80 and eighths, \$5.50.

ERGOT is inquired for to a moderate extent. Spot goods are held at 21 @ 22c. for German and 25 @ 26c. for Spanish. Cables from Hamburg of the 7th instant offer German at the equivalent of 19½ cents laid down.

GUARANA is in slightly better supply and offering at 80 @ 85c.

MANNA continues held and is selling in a small way at 65 @ 70c. for large flake, 25 @ 26c. for small, and 21 @ 22c. for sorts.

MENTHOL is lower and jobbing purchases can now be made at \$4.75 @ 5.00.

OPIUM shows a stronger tendency; late advices from Smyrna and Constantinople report the continuance of dry weather in the opium growing district, and higher prices are quoted. The situation here is characterized by a stronger feeling and holders are not disposed to increase the distribution by any concessions from the quoted range of say \$3.40 @ 2.42½ for single cases and jobbing lots. Powdered is held and meets with a fair jobbing demand at \$2.95 @ 3.00, with some holders quoting up to \$3.10@3.20.

QUININE has undergone no change of consequence, either as regards price or demand. There continues a steady, fair, consumptive inquiry and a firm market upon the basis of 24 @ 24½c. for foreign. The price from manufacturers' hands does not vary, 25c. being required for large bulk.

ST. IGNATIUS BEANS are inquired for to some extent, but business is held in check by the scarcity of the goods.

SUGAR OF MILK is passing out quite actively, and among other transactions we note sales of 3,000 lbs. at 8c.

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John E. Osborn,
Governor-Elect of Wyoming.

John E. Osborn, the newly elected governor of Wyoming, whose likeness accompanies this sketch, was formerly a druggist and is a graduated physician. He was born in Westport, Essex County, N. Y., on June 19, 1858, and there he lived until he was fifteen years of age, when he apprenticed himself to a druggist in the neighboring State of Vermont. He later studied medicine and attended medical lectures at the University of Vermont during the winter months, working during the summer months in a drug store to pay his college expenses. He graduated with honors in 1880 and immediately pushed for the far west, where by his unaided efforts he has accumulated a fortune and built up for himself an enviable reputation as an enterprising, public spirited citizen of honorable impulses and of sterling integrity.

Upon arriving in the then Territory of Wyoming he went to the town of Rawlins and opened a drug store, building up a good business and establishing a reputa-

tion as a physician that placed him in the front rank of his profession.

A Vast Undertaking.

After five years of labor, with the help of 247 editors, and the enormous expenditure of nearly one million dollars, the Funk & Wagnalls Company announce that the last page of the second, the concluding, volume of the new Standard Dictionary, is now in type. This volume will soon be ready for delivery. The sales of the new dictionary are phenomenal. The publishers have a mathematician who has figured out that if the copies required to fill the advance orders were laid one on top of the other, the stack would be over three miles high, and laid end to end would make a path over fifteen miles in length.

Where Purity Counts.

When the physician or the public go the pharmacist for liquor, it is because the pharmacist is expected to furnish a pure

and reliable article. That is also the reason why G. W. Meredith & Co., of East Liverpool, O., go to the drug trade to sell their Meredith's Diamond Club Pure Rye Whiskey. The discerning pharmacist will not disappoint either Messrs. Meredith & Co., or his customers, for he will purchase Meredith's Diamond Club Pure Rye Whiskey from the one and sell it to the other, to the mutual benefit of all three parties to the transaction. This whiskey is distilled especially for medicinal purposes, and the use to which it is to be put is carefully kept in mind throughout the whole process of aging and bottling the liquor.

It is put up in China jugs, as illustrated herewith, each holding one quart, and is also put up in pint and in quart bottles, one of which is also illustrated. This whiskey is sold by a large number of the best wholesale and retail pharmacists, among the former being the following, through whom supplies may be ordered: West & Jenney, Boston, Mass.; Strong, Cobb & Co., Cleveland, O.; Benton, Myers & Co., Cleveland, O.; Walding, Kinnan & Marvin, Toledo, O.; Farrand, Williams & Clark, Detroit, Mich.; Kauffman-Latimer Co., Columbus, O.; Orr, Brown & Price, Columbus, O.; Bailey Drug Co., Zanesville, O.; Ball-Warfield Co., Ironton, O.; John D. Park's Sons Co., Cincinnati, O.; A. C. Henderson Drug Co., Pittsburg, Pa.; Wm. Smyth & Co., York, Pa.; Smith, Kline & French Co., Philadelphia, Pa.; Morrisson, Plummer & Co., Chicago, Ill.; Fuller Fuller Drug Co., Chicago, Ill.; Lord, Owen & Co., Chicago, Ill.; F. S. Hubbard & Co., Buffalo, N. Y.; J. S. Merrill Drug Co., St. Louis, Mo.; Indianapolis Drug Co., Indianapolis, Ind.; Daniel Stewart, Indianapolis, Ind.; Standard Drug Co., Cincinnati, O.; Wheeling Drug Co., Wheeling, W. Va.; Geo. L. Clafin & Co., Providence, R. I.; Smith, Benedict & Co., Boston, Mass.; McKesson & Robbins, New York.



A Railroad Doctor's Prescription.

General Western Agent C. K. Wilber of the Lake Shore and Michigan Southern Railroad, with headquarters at Chicago, is, without trying, one of the really funny men of the railroad world. The other day, for example, he accomplished this advertisement, which old hands at the business truly say is one of the brightest little things ever put on paper:

B

The Lake Shore Limited regularly on your Eastern trips to prevent that tired feeling so often experienced by travelers.
Le ves Chicago, V. XXX P. M.
Arrives New York, VI XXX P. M.

C. K. WILBER,
W. P. A.

Can be taken without shaking.

General Passenger Agent Daniels says that Dr. Wilber's prescription is equally efficacious on trains of the New York Central, he having this assurance from Drs. Cosby and Dumond, who have tried it, with perfect success.

General Passenger Agent Fee of the Northern Pacific, has offered to all his local agents and subordinates a handsome prize in money for the best advertisement of the line, and it is obviously well for them that Mr. Wilber "isn't in it."—From the *Brooklyn Standard Union*.

Notes on Prices.**Tablet Triturates Reduced.**

Still the mill goes on grinding in the reduction of prices on tablets. One by one all of the manufacturers are wheeling into line, and now only one or two of the most conservative maintain their old prices. This sudden development of competition has brought out prices which were undreamed of last year. For an example of what one of the leaders in this movement is doing, we would refer to the advertisement on another page of Billings, Clapp & Co., who are making a specialty of the "bulk" business in tablets, and evidently intend to quote prices on standards which cannot be beaten. They write us that they are selling soda mint and chlorate potash tablets in kegs at a still lower figure, and that they intend to lead in this branch of the business. Write them for quotations.

Change of Price in Ridge's Food

Woolrich & Co., Palmer, Mass., announce special prices on gross lots of Ridge's Food in the following circular in which they invite dealers to make up orders for one gross of any size, sending checks at rates below, less 20 per cent. and the goods will be delivered, all charges prepaid:

No.	size	per doz.	list	\$2.80	Retails	.35
"	"	"	"	"	5.00	"	.65
"	"	"	"	"	10.00	"	1.25
"	"	"	"	"	14.00	"	1.75

They offer to send an assortment of printed matter free to any druggist on application.

Wholesale Druggists' Prices.

We note below the important changes which have taken place during the interval, in the prices at which retailers usually purchase goods in ordinary lots, from wholesale druggists:

ACID, OXALIC, has declined from 10@13c. to 9@12c.

ALCOHOL is now quoted \$3.40@3.65 and Cologne \$3.60@2.75, a decline of 2 cents.

ANISE, STAR, has declined from 33@38c. to 25@30c.

ANODYNE, HOFFMAN'S, has advanced from 54@57c. to 55@60c.

BALSAM, PERU, is lower, owing to arrivals, and is now quoted \$1.75@2.09.

BARK, CASSIA, is higher, and we are now quoted 8½@10c.

BEAN, TONKA, is in better supply and prices have declined from \$2.00@2.25 to \$1.75@2.00.

BERRIES, CUBE, has declined from 25@30c. to 20@25c., and powdered from 85@40c. to 30@35c.

CALCIUM HYPOPHOSPHITE, has advanced from \$1.80@1.45 to \$1.40@1.50, and Phosphate is lower at 18@22c.

CAMPOR is weaker and prices have receded from 42 @ 47c to 38 @ 45c.

COBALT, powdered, is now quoted 18 @ 21c.

COCAINE HYDROCHLORIDE, has advanced from \$5.70 @ 5.95 to \$6 @ 6.25, and ALKALOID from \$6.50 @ 6.70 to \$6.75 @ 6.95.

CODEINE has declined from \$6 @ 6.25, to \$5.70 @ 5.95 and SULPHATE from \$4.80 @ 4.40 to \$3.85 @ 4.05.

DRAGON'S BLOOD is scarcer and prices are higher, \$1.10 @ 1.25 being now asked.

ERGOT, Spanish, has declined from 80 @ 85c to 25 @ 30c.

KOLA NUT is easier and in better demand 40 @ 50c.

COD LIVER OIL, Norwegian, has declined from \$1.25 @ 1.50 to \$1.10 @ 1.25.

SEED, Anise, has declined from 35 @ 40c to 25 @ 30c.

TANNIGEN, a new addition to the list, is quoted 75c per oz.

CELERY has declined from 20 @ 25c to 15 @ 20c.

WAX, CARNARUBA, has advanced from 24 @ 30c to 30 @ 35.

Review of the Wholesale Market.

New York, Dec. 10, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

There has been no special activity in the market during the past two weeks. The receipt of jobbing orders is fairly up to the average, though considerable caution is yet displayed by buyers, the rule being to confine operations to immediate requirements only. Speculation is limited and of a very tame character; and the low prices prevailing do not serve to stimulate, or in other ways influence the demand. Regarding prices the tendency upon general goods is to greater firmness, and the market is steady in tone with few changes of interest to report. Opium has advanced in the interval and is tending higher. Quinine continues firm. Oil of pepper-mint is easier. Caffeine has declined. Cocaine is higher. Haarlem oil is lower. Other changes of note are tabled below as follows:

ADVANCED.	DECLINED.
Bayberry bark.	Oil peppermint.
Opium.	Bleached coriander seed.
Refined saltpetre.	Caffeine.
Jamaica ginger.	Ginseng root.
Gum benzoin.	Canada balsam.
Oil bergamot.	Haarlem oil.
Oil bitter almond.	Oil lavender.
Powdered foenu greek.	Menthol.
Gum kino.	Citric acid.
Cocaine.	

ALCOHOL does not vary from the previous range of \$2.38 @ 2.40 for grain and 70 cents for wood; Alcoholsene is firm at \$1.85.

BALSAM COPAIBA has been in fair request and among other transactions we note sales of 21 kegs at 38 cents.

BALSAM FIR, Canada, continues to offer at \$2.45 @ 2.50 in barrels and \$2.60 in cans; can lots constitute the bulk of business.

BALSAM PERU continues held at \$1.60 @ 1.75. The inside price can be shaded upon a firm bid.

BALSAM TOLU is firmer and the general asking price for the small available supply of prime is 30 cents.

BARKS.—Bayberry is exceedingly scarce and the price in consequence has been advanced to 4¼@5c. Buckthorn is in demand with sales of 2,000 lbs. at 6 cents.

BELLADONNA LEAVES are cabled firmer abroad with 10¼ cents quoted as the lay down price of prime quality.

CAFFEINE is in better supply and the tone of the market is easier with stock offered at \$6.80 @ 7.00.

COD LIVER OIL, Norwegian, continues in moderate jobbing demand and values are firm at the range of \$28.00 @ 30.00.

CASSIA BUDS are held and selling at 19 cents. The stock is somewhat limited and said to be under good control.

COCA LEAVES continue in light supply and the price is well sustained at 20 @ 22c. for Truxillo, and 30 @ 32c. for Huanuco.

CUTTLE BONE, Trieste, is in steady moderate request, with business at 8¼ @ 8½c.

COCAINE MURIATE has been advanced by the various foreign and domestic manufacturers 25c. per ounce. The new quotations are for lots of 100 ounces \$5.25, ounce vials, \$5.30 and eighths, \$5.50.

ERGOT is inquired for to a moderate extent. Spot goods are held at 21 @ 22c. for German and 25 @ 26c. for Spanish. Cables from Hamburg of the 7th instant offer German at the equivalent of 19½ cents laid down.

GUARANA is in slightly better supply and offering at 80 @ 85c.

MANNA continues held and is selling in a small way at 65 @ 70c. for large flake, 25 @ 26c. for small, and 21 @ 22c. for sorts.

MENTHOL is lower and jobbing purchases can now be made at \$4.75 @ 5.00.

OPIUM shows a stronger tendency; late advices from Smyrna and Constantinople report the continuance of dry weather in the opium growing district, and higher prices are quoted. The situation here is characterized by a stronger feeling and holders are not disposed to increase the distribution by any concessions from the quoted range of say \$2.40 @ 2.42½ for single cases and jobbing lots. Powdered is held and meets with a fair jobbing demand at \$2.95 @ 3.00, with some holders quoting up to \$3.10@3.20.

QUININE has undergone no change of consequence, either as regards price or demand. There continues a steady, fair, consumptive inquiry and a firm market upon the basis of 24 @ 24¼c. for foreign. The price from manufacturers' hands does not vary, 25c. being required for large bulk.

ST. IGNATIUS BEANS are inquired for to some extent, but business is held in check by the scarcity of the goods.

SUGAR OF MILK is passing out quite actively, and among other transactions we note sales of 3,000 lbs. at 8c.

THYMOL is finding sale in moderate quantities at \$2.50, though bulk in quarters are offering stock in a large way at \$2.10.

TONKA BEANS, Angostura, appear to be developing strength, and importers are quoting \$1.80 to 1.45 as to quality. The jobbing quotation remains \$1.65.

SENNA continues in good jobbing request with numerous sales within the range of quotation.

WAX, Brazil, is quite scarce, and the price in consequence has been advanced to 20 @ 80c. for numbers 8 and 1 respectively.

DYESTUFFS.

CUTCH remains quiet, but the market appears well sustained upon the basis of 4½ @ 6c. for bales as to quantity and quality.

GAMBIER is without important change, either as regards price or demand. Spot goods quoted 4½ @ 4¼c. x-store and 4¼c. x-wharf.

DIVI DIVI from store is maintained at \$57.50 @ 55.00.

GALLS, Blue Aleppo, are jobbing at 18c. to 13½c.

SUMAC, Sicily, continues to offer at \$60.00 @ 65.00 with a moderate jobbing trade at this range. Purchase can be made to arrive at \$58.00 @ 60.00.

POTASH BICHRIMATE continues held and selling at 9c. @ 9¼c.

CHEMICALS.

ACETANILID is unchanged from previous quotations. Importers are supplying the requirements of the trade at the range of 88 @ 85c. for bulk as to quality.

ARSENIC, white, continues very scarce upon spot and the market is firm at 8¼ @ 8½c. To arrive purchases can be made at 8½c.

ACETATE OF LIME is meeting with only moderate inquiry; current sales at the range of 90 @ 95c. for ground, and \$1 50 @ 1.55 for gray.

BLEACHING POWDER is quiet upon spot though there is no special pressure to realize below 1¼ @ 2c.

BLUE VITRIOL is very firm at 8¼ @ 8½c. The inside price for car-load lots. Jobbing purchases are making at 8¼ @ 8½c.

BORAX remains quiet. Concentrated quoted 6 @ 6½c. as to quantity, and California refined 6½ @ 6¼c.

BRIMSTONE, crude, continues very quiet; best seconds are offered at \$17, and a similar price is quoted for stock in transit.

CHLORATE OF POTASH is given very little attention, though there is seemingly no disposition to meet buyers at any concession from 10¼c. for crystals; bids of 10¼c. have been submitted and turned down.

CREAM TARTAR remains quiet, but the market is steady upon the basis of 17¼ @ 22½c for crystals and powdered respectively.

CITRIC ACID has declined one half cent; the quotation now being 87c for barrels and 87½c for kegs.

NITRATE OF SODA is maintained in steady position with \$2.10 @ 2.15 quoted for stock as to quantity and \$2.10 @ 2.00 to arrive as to date. Forward shipments quoted at \$1.90 @ 1.95.

OXALIC ACID is firmer. Jobbing sales reported at 7½c.

MURIATIC ACID is slightly easier and in moderate request at the range of 75 @ \$1.25 for 18 to 23 degrees.

SAL SODA, domestic, is held at 70 @ 72½c. English is quoted 65 @ 70c.

SALTPETRE, crude, is in reduced supply and prices have advanced to 4.80 @ 4.85c. spot, refined is higher in sympathy and quoted 5¼ @ 5½c. for small and large crystals.

TARTARIC ACID continues held in steady position with the current sales at 18 @ 22c. for powdered and crystals respectively.

ESSENTIAL OILS.

ANISE develops no action of any consequence. The spot price remains \$2.85 @ \$2.87½. In face of the limited supply the market is well sustained.

BERGAMOT. Sanderson's has been advanced to \$2 15 in coppers.

CASSIA is well sustained at \$1.20 @ 1.25.

CUBEB continues dull, but the market does not vary from \$1.20 @ 1.25.

LAVENDER, garden, is slightly easier with the present range 40 @ 62c. as to quality.

LEMON is meeting with about the usual inquiry; numerous small sales are reported at the range of 80c. @ \$1.85 as to quality.

ORANGE, Sanderson's bitter, is firmer and quoted \$3.75.

PEPPERMINT is a trifle irregular. Western offers in the interior at \$1.60 @ 1.65 and Wayne County \$1.90; in this market the former can be had at \$1.60 @ 1.65 and the latter \$1.75 @ 1.80. H. G. H. quoted \$2.20 @ 2.25.

SASSAFRAS is without important change; pure held at 86 @ 88c. H. G. H. quoted \$2.20 @ 2.25.

WINTERGREEN is jobbing at \$1.80 @ 1.45.

ASAFETIDA continues in moderate jobbing demand and firm at 25 @ 40c. as to quality.

BENZON, common grade, has sold to the extent of some 2,000 lbs. at 28c. for best quality up to 38 @ 40c. is asked.

CAMPOR is less freely inquired for, though prices are well maintained at 37 @ 38c. for barrels and cases.

CHICLE shows no important variation, 28 @ 30c. being the range quoted by the various holders.

DAMAR, Batavia, is now quoted 20c. as an inside price.

KINO is scarce and higher, \$1.60 @ 1.75 being asked for the limited supply available.

MASTIC continues quiet at the range of 55 @ 60c.

TRAGACANTH is quoted 70c. for first flake; inferior grades offer down to 20c.

ROOTS.

ALTHEA, cut, is somewhat scarce; numerous jobbing transactions are reported at the range of 16 @ 18c.

CALAMUS is meeting with fair inquiry with the current sales of bleached and peeled at 20 @ 21c.

GENTIAN is in fair supply and the tone of the market is easier. Spot goods are now obtainable at 8¼ @ 8½c.

GINSENG continues extremely dull, there being a notable absence of inquiry for supplies from headquarters. We quote the nominal range of the market at \$2.50 @ 3.75 as to quality.

GOLDEN SEAL is without change; 18¼ @ 19c. is generally asked.

IPECAC remains quiet but steady at \$1.10 @ 1.20 as to quality.

JALAP has sold at 24c. but 25 @ 27c. is generally required as to quality.

ORRIS is well sustained and a fair jobbing business is reported.

SARSAPARILLA, Mexican, is maintained at 7¼ @ 7½c, though the supply momentarily is limited.

SNAKE, prime grades, Texas, are maintained and selling fairly at 27 @ 30c.

SEEDS.

CARAWAY is very firm, with 6½c asked and obtained.

CORIANDER, bleached, has declined to 7½c, this action having been influenced by competition. Unbleached is quoted 7 @ 7½c spot, and 1 7c to arrive.

CUMMIN, prime grades of Malta, are in light supply and held at 8½c.

MUSTARD, California, is inquired for to some extent and the market is firm at 8¼ @ 8½c for yellow, and 2¼ @ 3c for brown.

POPPY remains quiet at nominally 8½ @ 4c.

—:—

A Growing Business.

Since Mr. C. C. White transferred his business to the C. C. White Toilet Paper Mfg. Co., that concern has enlarged its facilities four-fold, and now has a very large and commodious factory at Seneca Falls, N. Y., which is fitted up with electric light and power and other modern conveniences. The firm continues its sales-rooms and warehouses for the distribution of goods at 164 Duane street, where orders should be addressed. A large demand for the new perforated roll paper called "Doe-skin" is reported.

—:—

A New Departure.

The manufacturers of Ridge's Food have recently decided to make a new departure by which druggists can stock up readily. They allow on direct orders, check accompanying, the regular 20 per cent. off, and deliver free to the town gross lots made up of any size; heretofore they have required two gross orders.

—:—

For Learners in Whist.

Among the modern improvements which have made whist more and more a game of skill and less a game of chance, the greatest is undoubtedly the new system of leads perfected by N. B. Frist of New Orleans, and adopted by all the leading whist authorities in this country and abroad.

The next question is how to learn the leads. Some people, gifted with exceptionally retentive memories and patience and perseverance, can sit down and memorize them from the books. The great majority are not so fortunate, however, and for their benefit the American Whist Packs have been invented, on the theory that actual play is the best form of instruction and that practice makes perfect. Each pack contains the usual number of playing cards, and in addition thereto four extra cards for whist purposes. The backs of the extra cards are the same as the rest of the pack, in order that their position, when held in the hand, may not attract attention or disclose information. On their face, however, they have printed a clear and concisely arranged table of the leads, beginning with ace, king, queen, jack, at the head of the various suits, and ending with the minor combinations and low cards.

The American Whist Packs are being introduced by the American Whist Pack Co., 444 Powers' Block, Rochester, N. Y., price post-paid 25 cents.

American Druggist and Pharmaceutical Record.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on the 10th and 25th of each month. Changes of advertisements and all copy for publication should be received by the 1st and 15th of each month.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

Marks of Sense and Enterprise.

The Fourth Estate is authority for the statement that just after a recent number of the American Druggist was ready to go to press, a two-page advertisement was received by telephone from Parke, Davis & Company of Detroit, set up and put in its place within half an hour. This is a good sample of an up-to-date proceeding. We have first a firm with sense and money enough to advertise. Second, a paper with enterprise enough to meet an emergency, and third the long distance telephone.

The foregoing from our bright contemporary The Spatula, of Boston, is correct except as to one particular. The credit for placing the two page advertisement belongs properly to the enterprising firm of Frederick Stearns & Co., Detroit.

CHRISTMAS GREETING.

TO YOU, dear reader, we extend a hearty Christmas greeting. May all prosperity, all happiness attend you.

It was a charming custom, that of Fielding, of Richardson and of Smollet of apostrophising the "dear reader," and at this season of love, of joy, of charity, and of happiness we too would address you as "dear reader." While these old masters of literature touched their readers through the imagination, we who deal with things material must appeal merely to your understanding and to your self interest. Nevertheless we feel that we are closer to you than was Fielding to the ruffled and bewigged reader who laughed and wept over "Tom Jones." For do we not enter into your daily life, your studies, your business and in some sort your pleasures? And, if you have been a careful reader, you must concede that we have contributed something to your success and to your mental growth.

From many of you we have heard kind words of encouragement and of appreciation, and for this we thank you, and we trust that for many years it may be given us to extend to the same circle of dear readers this general but none the less hearty acknowledgement of our appreciation of the support accorded us in our efforts to keep the pharmacists all over the world in touch with the rapid advances of modern pharmacy.

THE YEAR.

THE year that has passed has been an important one in many lines of activity. In the domain of pharmacy a few facts stand out with especial prominence as calculated to leave an impress upon the profession. Among these the development of the "serum therapy" on an apparently practical basis promises at present to outrank in importance any medical discovery made since the introduction of vaccination, and of anaesthetics.

In association matters the Interstate Retail Druggists' League has made rapid and substantial progress throughout New England and New York, and as reported in our news columns, there is every reason to expect an extension of the interest in the League to Philadelphia and Baltimore within the near future.

Of the making of books there is no end and the appearance of the revised Pharmacopoeia has precipitated during the year a number of new books treating of pharmaceutical subjects.

Of the distinctly new publications the Handbook of Pharmacy by Prof. Virgil Coblentz is pharmaceutically the most important of the works appearing from the American press. This volume has already been reviewed at length in these columns.

Professor Wulling of the University of Minnesota has collected the series of articles on Inorganic Pharmaceutical Chemistry, which he prepared for the *Pharmaceutical Record* in 1892, and has published them in book form under the title "An Elementary Course in Inorganic and Pharmaceutical and Medical Chemistry." The plan of the volume does not differ from that followed in the original publication, the author leading up through the theory of chemistry to the practical operations of the laboratory, and explaining, as he proceeds, all of the simpler manipulations of the apothecary, where these have any relation to chemical processes. The work is eminently practical in its character, and will find favor on this account with all students and teachers of pharmacy.

Volumetric analysis as applied in pharmacy has been carefully studied by Professor Schimpf, of the Brooklyn College of Pharmacy, and the results are seen in an excellent manual of the subject which is certain of adoption as a text-book in the leading colleges of pharmacy.

Of forthcoming works on pharmacy, none is awaited with so much expectancy as the one promised by Professor Caspari of the Maryland college. Professor Caspari's newly imposed duties as permanent secretary of the American Pharmaceutical Association have delayed the completion of the work somewhat, but its publication should follow closely after the appearance of the Proceedings of the Association for 1894.

The losses which pharmacy has suffered in the departments of Materia Medica and botany are accentuated in the passing away during the past year of two such eminent exponents of these subjects as Bentley, of England, and Fluckiger of Switzerland. The loss of these two gifted men will be keenly felt for many years to come, and we are certainly the poorer by their demise.

MOVING IN THE ALCOHOL MATTER

NOW that Congress has convened the agitation in the matter of tax-free alcohol is taking on a more definite shape.

One favorable aspect of the situation is, that some interest is being manifested in the movement outside of the drug trade, for until some popular interest is aroused Congress is apt to look askance upon the movement as favoring the druggist at the expense of the public. It is pleasing, therefore, to note that the New York Herald has espoused the cause of the druggists by publishing the following editorial comment:

It is reported that the Treasury Department may make an early effort to have Congress repeal section 61 of the new tariff, designed to permit the free use of alcohol in the arts and medicinal preparations.

The National Wholesale Druggists' Association very properly makes a most earnest protest against any such repeal. That section of the new tariff is ambiguous and the Treasury finds it difficult to execute it. But Congress ought to amend it in such a way as to secure free alcohol for medicinal preparations. The portion of spirits required for medicine for the sick and as a solvent for commodities used in the arts has for thirty-two years been enormously taxed. The McKinley duty was \$2.50 per gallon. The Druggists' Association says:

We desire to call your attention to the fact that the enormous tax of over five hundred per cent. over the actual untaxed value of alcohol is the tribute which these industries are called upon to yield.

It will be a great outrage upon the whole country and a relapse to barbarism if Congress does not now correct the ambiguity in section 61 and provide for giving effect to the obvious intention of the new law, which was to allow the people free alcohol for medicinal uses. A nation which will tax the medicine required for its sick "five hundred per cent" over the actual value of that medicine must forfeit the respect of all civilized men. The Association deserve the thanks of the people for their earnest appeal to Senators and Representatives.

The following circular has been issued by Edward H. Hance, Chairman of Committee on Legislation of the National Wholesale Druggists' Association:

An early effort may be made by the Treasury Department to have the section in the customs law—known as the "Hoar Amendment"—repealed on account of its ambiguity and failure to provide the Internal Revenue office with the necessary means for its execution.

It would seem inexcusable if our association were to permit such action without earnest protest on the part of its members.

The National Wholesale Druggists' Association is on record as being in favor of Free Alcohol for medicine and the arts.

It has upon several occasions so expressed itself.

Now that an entering wedge has been applied to the removal of a burdensome and offensive tax, the advantage gained should not be lost through failure to make a strong appeal to our Congressional Representatives for the consummation of the relief we have so long applied for.

Will you not promptly write to the Senators from your State, and Representative from your District, advocating measures that will make this law effective, and at the same time free from regulations of an obnoxious and oppressive character that

might defeat the purpose for which it was intended.

To be of any avail the movement should be general and made in concert. It is in just such movements as this that the benefit of organizations is most pronounced.

:o:

THE STATUS OF THE PHARMACIST—MILITARY AND OTHERWISE.

FROM Atlanta comes a daily paper with a column-long article on the status of the military pharmacist in the army and navy of the United States, based upon information gained from Dr. Geo. F. Payne, of the Atlanta College of Pharmacy, which is calculated to do much good in directing the attention of the general public toward the injustice and bad judgment of the policy pursued by the United States in this matter. It is not to be expected that educated and competent pharmacists will voluntarily relinquish their liberty of action by joining the army or navy, unless the advantages offered in rank and pay are sufficient to amply compensate for the disadvantages attendant upon the life of a soldier, and investigation would probably show that comparatively few of the pharmacists of the army had a high technical education before they entered the service.

Aside from the particular matter under discussion, however, which has quite recently been referred to at some length in these columns, there is a valuable suggestion to be found in the matter and manner of the newspaper article referred to. It is so constructed as to impress the reader with the importance of pharmacy, and with the high character of the pharmacist. This is done by inference rather than directly, but none the less forcibly.

The article is evidently written with appreciation of the responsible and dignified position of the pharmacist in the community, and is therefore calculated to be of benefit aside from the matter of the position of the military pharmacist. An article in a somewhat similar strain, so far as the relations of the pharmacist to the public is concerned, was published in connection with the meeting of the American Pharmaceutical Association at Asheville, N. C., last summer, appearing as a syndicate article in some thirty leading Sunday newspapers. This latter article recounted the origin of the Association, the active part taken by it in procuring the enactment of laws governing the quality of drugs admitted from abroad, etc., and was on the whole calculated to impress upon the minds of the many thousands who read it the high aims and standing of the Association.

These two are practical instances of a work in which all pharmacists can help to a greater or less degree, namely, the elevation of the calling in the eyes of the public. It may not fall to the lot of each pharmacist to be enabled to reach the public through the newspapers, but each one has

an even greater responsibility, for in his own sphere, among his own customers and in his own business and social relations he should practice what others preach through the daily press, and in public places, which is: That pharmacy is an honorable and a dignified calling, that though dealing with petty details the pharmacist is not narrow-minded, that though a tradesman in that he sells goods at a profit, he is yet a professional man in that his scientific knowledge is his first and most important qualification, and that he deserves the confidence and respect of the community at large.

Some months since there appeared in the Bulletin of Pharmacy an editorial article advocating the establishment of a bureau for the dissemination to the public of literature which would tend to bring about a better appreciation of the high qualities of the pharmacist. The germ of the idea is excellent, but it is unnecessary to wait for the formal establishment of such a bureau. Every pharmacist and every clerk has it in his power to do something toward the elevation of pharmacy, and it behooves each one to do his share whether by example, by precept, or by both.

:o:

A LAUDABLE UNDERTAKING.

OUR consistent advocacy of the introduction of antitoxin into this country from Europe and of the establishment of depots for the manufacture of the serum has been the means of attracting very general attention to the subject. Practical applications of the remedy are being made by several of the health boards of the country, and its manufacture has been undertaken by a few.

It has, however, remained for the New York Herald, with the enterprise and sagacity characteristic of that great newspaper, to undertake the manufacture of the diphtheria antitoxin for the purpose of supplying the afflicted poor of New York with the remedy. Having this laudable end in view, the Herald has inaugurated a popular subscription and contributed a donation of \$1,000 to head the list. The project, as might be anticipated, meets with the hearty approval of the medical profession, and the humanitarian appeal of the Herald has been well received.

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IN view of the lack of any well recognized source of information on the subject of drafting circular announcements, an invitation is extended to our readers to favor us with their views in regard to approved methods of drawing up these documents.

We desire a thorough and practical discussion of the subject and shall be glad to make all necessary illustrations so as to present the matter in a clear and attractive way, and trust that we may hear from many pharmacists in all parts of the country.

Written for the
American Druggist and Pharmaceutical Record.

SOME SALABLE SPECIALTIES.

BY GALEN JR.

The growth of the cut rate evil makes it imperative that the pharmacist do something to protect himself. A large portion of the sales of every pharmacy is made up from the sale of patents and any cut in the price reduces the pharmacist's profits by the amount of that cut. Many pharmacists have found that by putting up a line of goods of their own they can in some measure offset the evils arising from the cutting of prices on proprietary preparations.

In the writer's opinion this is the correct course to pursue, and he can see no reason why any pharmacist having good formulas and putting them up in good shape should not be able to gradually create a demand for his own preparations.

Of course he cannot expect any large sale immediately, but by careful and persistent work he can ultimately create a demand for them that cannot but be very profitable, besides the fact that in inducing customers to come to his store to buy preparations he generally induces them to buy anything else they need in this line.

The formulas given below have been found reliable in every way. And to those who are looking for formulas for the purpose indicated the writer would recommend them as in every way worthy of consideration.

In putting up any line of goods the neater and more elegantly they are put up the more easily they can be sold. This is so in any line. No matter how meritorious the preparation is if put up in a careless manner the first impression of the customer is bad.

BLOOD PURIFIERS.

There is quite an extended demand for dry blood purifiers or teas, and the writer knows several pharmacists who have worked up quite an extensive demand for similar goods. Owing their virtues largely to the fact that they are laxative they are being sold for constipation, etc.

The following formula will yield an efficient preparation:

	Ounces.
Powdered senna.....	30
Powdered sugar.....	30
Powdered fennel seed.....	10
Powdered caraway seed.....	2
Powdered juniper berries.....	6
Powdered celery seed.....	4
Powdered couch grass.....	4
Powdered sassafras bark.....	4
Powdered Rochelle salts.....	8

I will abstain from giving any directions with any of the formulas, for any competent pharmacist can easily get up directions to suit his own fancy.

FOR SUMMER COMPLAINT, DIARRHOEA, ETC.

The following is an excellent remedy for summer complaint, diarrhoea, etc. Being free from opiates it is entirely harmless and will be found very efficient.

BLACKBERRY CARMINATIVE (NO. 1)

Compound fluid extract of blackberry.....	1 oz.
Fluid extract of crane's bill.....	1/2 oz.
Syrup of rhubarb and potash sufficient to make.....	16 oz.

This may be called blackberry carminative or any name to suit the fancy, and is a pleasant tasting and efficient preparation.

Another similar preparation which is preferred by many is made as follows:

BLACKBERRY CARMINATIVE (NO. 2.)

Chloroform.....	1 drachm
Tincture of capsicum.....	2 drachms

Compound fluid extract of blackberry.....	1 fl. oz.
Fluid extract of crane's bill.....	1/2 fl. oz.
Syrup of rhubarb and potash to make.....	16 fl. oz.

COMPOUND CATHARTIC SYRUP.

Another article that finds a ready sale is a cathartic syrup. A very pleasant tasting and efficient syrup of this kind can be made as follows:

Bitterless fluid extract of cascara.....	2 fl. oz.
Fluid extract of rhubarb.....	1 fl. oz.
Fluid extract of senna.....	1 fl. oz.
Oil of fennel.....	5 drops.
Oil of caraway.....	5 drops.
Potassium carbonate.....	10 grs.
Saccharin.....	30 grs.
Simple syrup sufficient to make.....	16 fl. oz.

Add the potassium carbonate to the fluid extract of rhubarb and dissolve them. Mix the extracts and add the oils and saccharin, then add the syrup.

This makes an elegant syrup and where the attention of physicians is properly called to it, it can be largely sold on prescription.

ASTHMA REMEDY.

Stramonium leaves.....	2 lbs.
Saturated solution of potassium nitrate, sufficient quantity.	

Sprinkle the dried leaves with the solution and dry thoroughly, then rub to a coarse powder. This remedy will be found very efficient, and the potassium nitrate makes it burn readily.

HEALING OINTMENT.

Benzonated ointment of oxide of zinc.....	1 oz.
Gum turpentine.....	2 oz.
Carbolic acid.....	2 dr.

This makes a very fine healing ointment. If desired a small amount of resin can be added.

There is quite a demand for such remedies as Malydor, Zip, Injection Brou, etc. A remedy of this kind that will be found to give excellent satisfaction can be made as follows:

INJECTION MABILLE.

Boric acid.....	60 grs.
Sulphate of hydrastine.....	8 grs.
Water.....	1 pint.

Use as an injection.

If this is properly put up there will be no trouble in finding a sale for it in place of the many similar patent preparations. In offering a medicine of this kind the directions should be made very explicit, and the patient directed to use bicarbonate in small doses to neutralize acidity of the urine.

Explicit directions do much to give a person confidence in any remedy.

Every pharmacist has a demand for a good liniment and there is no preparation on which it is so easy to establish a trade. The following combinations will be found easily made and first-class in every respect; besides they will not separate.

POWHATTAN LINIMENT.

Cotton seed oil.....	6 oz.
Powdered borax.....	30 grs.
Oleic acid.....	2 dr.
Water.....	1 fl. oz.
Ammonia water.....	5 fl. oz.
Turpentine.....	5 fl. oz.
Oil of sassafras.....	5 fl. oz.

Mix the borax and water and with this mix the oil; then add the oleic acid and shake. Add ammonia and agitate well, then add turpentine gradually and agitate; lastly add the oil of sassafras.

The following is to be preferred, however:

OLEIC LINIMENT.

Cotton seed oil.....	6 oz.
Powdered borax.....	30 grs.
Oleic acid.....	2 dr.
Water.....	1 fl. oz.
Water of ammonia.....	5 oz.
Turpentine.....	2 oz.
Chloroform.....	2 oz.

Proceed as directed in the first formula. These formulæ can be modified to

suit the ideas of the pharmacist, and the amount of oil and ammonia varied to suit.

A little experiment is all that is necessary to make perfect preparations of this kind. They should be put up in wide mouth bottles. There seems to be an extended sale for headache preparations in granular effervescent form.

The following will be found an excellent formula for a preparation of this kind:

EFFERVESCENT HEADACHE SALT.

	parts.
Potassium bromide.....	150
Caffeine.....	50
Acetanilid.....	40
Sodium and potassium tartrate.....	410
Sodium bicarbonate.....	500
Tartaric acid.....	450
Sugar.....	350

Have the different ingredients thoroughly dried and in fine powder, then mix thoroughly and put into dry bottles, and cork tightly.

If it is thought desirable to granulate same, the mixed powders can be moistened with alcohol and rubbed through a No. 16 or 20 sieve, and thoroughly dried, and then bottled.

—:O:—

SPONGES.*

BY WILLIAM B. BURK,

Philadelphia.

Sponge is a substance with which almost every one is familiar, as there are but a few families or individuals living in civilized communities who do not find occasion to use it for a great variety of purposes. The article is so very useful that a large number of inconveniences would arise if it could not be obtained. Without it, what would the surgeon, the traveler or the housekeeper do? And, yet, most of those that use sponges in an infinite variety of ways all their lives, never stop to consider how they are formed; that is, whether they are plants or animals or what their history or habits.

Sponges consist of a frame work or skeleton, coated with gelatinous matter and forming a non-irritable mass, which is connected internally with canals of various sizes. The ova are very numerous, and present in appearance the form of irregular shaped granules derived from the gelatinous matter which grow into ciliated germs, and, falling at maturity into small canals, are then expelled by the orifices. When alive, the body is covered by a gelatinous film, which, being provided with cilia, causes a current of water to pass in at the smaller pores and out at the larger apertures, the particles which enter with the water.

HABITAT OF THE SPONGE.

Sponges are found abundantly in tropical waters generally. They gradually decrease in numbers towards the colder latitudes until they become entirely extinct. They vary much in shape. Some are shaped like a vase, others are semi-cylindrical, others flat like an open fan and some are round.

The commerce in sponges is of considerable importance. The great difficulty which is experienced in any attempt to distinguish species, results from the extreme susceptibility of all keratose sponges to any change in external conditions. They appear to require, for the production of the forms in abundance, tropical or sub-tropical seas, and attain by far their greatest development in the number of the forms and species in the

*Read at a meeting of the Philadelphia Alumni Association and communicated by the author.

Gulf of Mexico and West Indian seas. The typical forms, the commercial sponges, are essentially confined to the waters of the Bahaman Archipelago and the southern and western coasts of Florida in the western hemisphere and to the Mediterranean and Red seas in the other.

THE FLORIDA SPONGE GROUNDS.

The Florida sponge grounds form three separate and elongated stretches along the southern and western coasts of the State. The first includes nearly all of the Florida reefs, the second extends from Anclote Keys to Cedar Keys and the third from just north of Cedar Keys to Saint Mark's. The Florida grounds have a linear extent of about 120 miles, beginning at Key Biscayne in the northeast and ending in the south at northwest channel, just west of Key West. The northwestern half of the grounds is very narrow, having an average width of only about five miles and being limited to the outer side of the reefs. At about the Maticumbo Reefs the grounds broaden out so as to cover the entire width of the reefs, which are much broader here than at the north. The entire southern half of the grounds has more or less of the same breadth, which is about thirteen or fourteen miles. The second sponge ground begins just south of Anclote Keys, with a breadth of seven or eight miles, which it maintains from a point opposite Bat Fort to Sea Horse Reef, just south of Cedar Keys. The total length of this sponging ground is about sixty geographical miles. Its distance from the shore varies somewhat. At the south the inner edge approaches within four or five miles of the main land and comes close upon Anclote Keys, but throughout the remainder of its extent it is distant six to eight miles from the shore until it touches the shallow bottom and reefs of Cedar Keys. The depth of water on these grounds, as indicated on the Coast Survey charts, ranges from three to six fathoms, but many portions are undoubtedly shallower than this. The northern ground, which maintains a nearly uniform width throughout, is about seventy miles long by about fifteen miles broad. It approaches to within about five miles of the shore and terminates just off the mouth of Saint Mark's River; the depth of the water is the same as upon the next one to the south, i.e., from three to six fathoms. The total area of the Florida sponging grounds, which are now being worked, including also those that were formerly fished upon but have since been more or less abandoned, may be roughly stated at about 3,000 square geographical miles. This probably does not include all of the sponge grounds occurring in Florida waters, for the fact that new areas are being constantly discovered would indicate that there might still be more to find, and it is certain that no very strenuous efforts have yet been made to extend the grounds already known, the discovery of new ones having generally been made by accident.

METHODS OF SPONGE FISHING.

The sponge fishery of the Florida coast differs from that of the Mediterranean, in that sponges are not obtained by divers, but by means of long hooks fastened at the end of a long pole and managed from a small boat. In Florida, small vessels of from five to fifty tons measurement, are employed to visit the grounds to afford quarters for the men and to bring home the catch. These vessels are generally of light draught and

schooner rigged, having proportionately large decks on which to carry boats, working gear, and the sponges as they are caught. The holds are of considerable size, for storing the sponges, and the cabins generally small, indicating a sacrifice of comfort to working room. Each vessel carries, according to its size, from five to fifteen men, one as cook and the remainder as fishermen, and, also, a small yawl boat to every two fishermen, to be used by them in securing the sponges. In addition to the working tools for taking sponges, they are provided with a sufficient quantity of provisions, wood and water for the trip, lasting from four to ten weeks.

A SPONGING OUTFIT.

The working outfit for a Florida sponging vessel consists of a few small yawl boats called dingies, and a supply of sponge hooks and sponge glasses. The boats used are always made as light as possible. They are from fifteen to twenty feet long and from four to six feet wide. The idea is to have the boats light enough to enable two men to haul them in and out over the side of the vessel, and yet strong enough to withstand the rough handling, which they are sometimes subjected to, and to carry the heavy loads resulting from a day's catch. While catching sponges it is necessary to scull the small yawl boats (dingies) from the stern, and, for convenience, in doing so, this form of sculling notch is used: A piece of oak plank, about six inches wide and one foot long, is notched at one end to fit the oar and inserted at the other between two guiding strips securely fastened to the stern sheet. This sculling notch is placed at one side of the centre of the stern sheet and is made to be easily removable in order that it may be taken out of the way when not needed. The sponge hooks are made of iron, with three curved prongs, measuring about five or six inches in width. The entire length of a hook is about eight inches, the upper end being made into a very strong socket for the insertion of the pole.

The sponge glass is made from an ordinary wooden bucket, the wooden bottom being replaced by one of ordinary window glass securely fastened by cement. In using a sponge glass it is placed upright on the surface of the water, the handle of the bucket is placed on the back of the neck of the fisherman with his head thrust down in the bucket. In this way the fisherman can distinctly see very small objects in very deep water, and he can easily distinguish good sponges from those of an inferior grade.

THE SPONGE FISHERMAN'S WORK.

When the sponger discovers a suitable sponge, through the aid of the sponge glass, he hurriedly grasps his hook, and plunging it direct upon the sponge, he skillfully pulls it from its habitation and brings it up to the surface and places it in the boat. As soon as the fisherman collects a sufficient quantity, he takes them to the vessel, where they are spread carefully on the deck in their natural upright position, so as to allow the slimy matter, called "gurry," by the sponger, to run off easily. During the first stages of decomposition they have a very unpleasant odor, something like decayed fishy matter. After the dingies collect sufficient sponges to make a vessel load, they are taken to what is called a sponge crawl, which is an enclosure of about ten to twelve feet, made generally by placing stakes in the beach where the water is from two to three feet deep.

Sponges, after being kept on the decks

of the vessel from one to two days, will generally be sufficiently cured to be taken to the crawls, where they are kept for a few days and then thoroughly washed and pounded with a flat stick. They are then placed upon strings of about six feet in length and taken to the markets, where they are sold at auction. They are generally sold in lots, and then carefully trimmed and packed in bales weighing from fifteen to one hundred pounds each, according to quality, the cheaper grades being generally packed in the larger bales.

VARIETIES OF SPONGES.

The principal varieties of sponges found in Florida are the following: Sheep-wool, yellow and grass. The Florida sheep-wool are the best quality, being of very fine texture, soft, and very strong and durable. The yellow sponge is of fine quality but not strong texture, and not near as soft or durable as the sheep-wool sponges. The grass is very much inferior to the others, not being strong and not as good shapes, and is easily torn.

There are no sponges found in the world to equal the Florida sheep-wool for softness and strength, and no better bath sponge can be found than a good solid Florida sheep-wool, although they are generally sold for washing carriages, etc. In former years, Florida sponges were loaded with lime or sand in order to decrease the price, but of late very few loaded sponges have been placed upon the market.

Sponges in great variety are also found in many places in the West India Islands, also in Cuba. The Cuban sponges are the next best to the Florida. The principal varieties found in Cuba or the West Indies are sheep-wool reef, yellow and grass, also velvet, which are next best to the sheep-wool.

The finer grades of sponges are found principally in the Mediterranean, such as the fine surgeons, toilet, bathing and nursery sponges, and they are very much higher in price than any others.

Florida produces nearly double the amount of sponges that are imported from all other countries; that is, in value, not quantity, and the demand for good Florida sponges is considerably greater than the supply. Consequently, the prices must advance from year to year. The prices have more than doubled within the last twenty years for Florida sponges.

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Note on Infusion of Senna.

Wm. Moore read a paper at a recent meeting of the London Chemists' Assistants' Association, in which he said that infusion of senna is observed to slowly deposit crystals when dispensed with Rochelle salts, and a muddy precipitate when dispensed with sodium phosphate. These two salts are recommended in medical works as specially suitable adjuncts to senna. Mr. Moore had found the crystals in the Rochelle salts and senna mixture to be practically pure calcium tartrate produced by double decomposition between the calcium salts of senna and the alkaline tartrate. The precipitate in the senna and sodium phosphate mixture contained upwards of 5 per cent. of inert mucilaginous matter, the remainder being calcium phosphate, with nearly one-ninth of its weight of magnesium phosphate. The deduction, therefore, was that, except for unsightliness, the mixtures are not materially affected by the precipitate, the acids natural to senna merely becoming transformed from soluble calcium to soluble sodium and potassium salts.



Artificial Musk.—According to the *Chemiker Zeitung* trinitrobutylxylol with a strong odor of musk, may be made by butylating dihydroxylol, and nitrating the resultant dihydrobutylxylol.

Sugar Renders Borax Soluble.—The addition of sugar to water renders borax more soluble, says the *Journal de Pharmacia d'Anvers*, and the addition of sugar will also restore gelatinous solutions of borax in mucilage to the fluid condition.

A Reaction for Dulcine.—Fuming nitric acid added to a small quantity of dulcine produces a very violent reaction, and gives a characteristic orange-yellow coloration. If the mass be warmed on a water bath, and two drops of phenol and two drops of sulphuric acid are added, an intense red color results.—B. & C. Druggist.

Borosalicilate Preparations.—Under the name of borosalicilate, a preparation has been introduced as a harmless antiseptic. It is a white powder, soluble in water, and is prepared by the action of sodium salicylate on boric acid. It is, therefore, only a mixture of salicylic acid and sodium borate. For the preparation of antiseptic gauze it is dissolved in water containing a little glycerin and the gauze is impregnated with it.—*Apotheker Zeitung*, through B. & C. Druggist.

Alkaloids of the Cactes.—Heffter reports that he has isolated a crystalline alkaloid from *Anhalonium fissuratum*, which he has termed anhalin. The base forms star-shaped white prisms, and is slightly soluble in cold, easily in hot, water, alcohol and ether. It melts at 115°, and forms well-defined salts. Among these are the sulphate ($C_{10}H_{11}NO$), $H_2SO_4 + 2H_2O$, forming easily soluble tables, and the hydrochlorate $C_{10}H_{11}NO \cdot HCl$. From *Anhalonium Williamsi* he extracted an alkaloid, which he terms pellotine, $C_{10}H_{11}NO$, which also forms well-defined compounds.—*Apotheker Zeitung*.

Anti-cholera Inoculation.—Haffkine's experiments in preventive inoculation against cholera are being carried out on a large scale in India, some 20,000 persons having, so far, been inoculated. The results, so far as reported on, do not appear to be conclusive, but on the whole it seems that the inoculations do confer a real immunity, but that its protecting influence is not exerted until several days after the inoculation, and then increases from day to day. How long the immunity lasts can not yet be stated. The experiments will be continued for some time.

Reuniol.—Geranium and rose oils have been found by Hesse (*Apotheker Zeit.*) to contain, in addition to geraniol, a second alcoholic body, which has been called reuniol, on account of its being discovered in the island of Reunion. At 20° C. it has a specific gravity of .865, and boils at 235.5°

226°. Its formula is either $C_{10}H_{18}O$, or $C_{10}H_{16}O$; but a further study of its derivatives is needed before this point can be settled. Hesse has made an examination of French, African, Spanish and German rose oils, and finds reuniol in them all. Spanish rose oil contains more reuniol than geraniol.

The Preparation of Diphtheria Antitoxin by Electrolysis.—Smirnow gives, in the *Berliner Klinische Wochenschrift*, No. 30, 1894, an account of experiments which he has made on the preparation of antitoxin by electrolysis, in the hope that this method might supplant the tedious and expensive method of animal immunization. After injecting a dose of pure bouillon culture of diphtheria, which proved fatal in a control experiment, into guinea-pigs, he employed bouillon cultures through which a current of electricity had been passed, as a heilserum, with successful results. He is hopeful that the serum prepared by electrolysis may be effective in the human subject.

A Simple Method of Purifying Commercial Ether.—For most analytical purposes, sufficiently pure ether can be easily obtained from the commercial article by mixing it with from 5 to 10 per cent. of its volume of a liquid paraffin, which boils above 800° C., and distilling at 40° to 50° C. The paraffin retains the alcohol and oxidation products in the retort, and if much water be present, this will form a layer beneath the paraffin. By heating the paraffin to 120° C., the impurities are expelled, and the oil rendered fit for further use. The method is quite efficacious in removing acids, evil-smelling compounds and peroxides, and may also be applied for the purification of light petroleum, aldehyde-chloroform, etc.—*Chem. Zeit.*, xviii., 1242.

A New Test for Cottonseed Oil.—Bocchi's reaction (alcoholic solution of silver nitrate reduced by cottonseed oil) does not always take place with cottonseed oil, and it is probably an impurity which occurs in most oils that produces the reaction. Gantter suggests (*Zeit. f. anal. chem.*) the following as a safer and more reliable reaction: Into a test tube 1 Cc. of the oil or fat to be tested is poured. It should be quite dry. 10 Cc. of petroleum ether are then added, and into the solution one drop of strong H_2SO_4 is poured. If there is any cottonseed oil present a brown color, becoming black, if there is sufficient of the adulterant present results. Peanut oil is the only oil which the author notes as behaving similarly, and the color in this case is not so intense.

A Monograph on the Globularine.—Another one of those excellent pharmacological monographs from the pen of Professor Heckel has just appeared. This last one contains, *inter alia*, a chemical section, which has been edited by Schlag-

denhauffen, the well-known collaborateur of Dr. Heckel, and a therapeutic section, which has been entrusted to M. Moursoa. The chemical study of the family show that the substances found throughout the order are very constant. The chief of these are a glucoside, globularine; a resin, globularetine; a volatile alkaloid, mannite, cinnamic acid, both free and in combination with potassium, tannin, glucose and coloring matters. Globularine acts as an antipyretic; it acts on the heart, and increases the arterial tension, like caffeine. Globularetine is a laxative and diuretic; the volatile alkaloid is a diuretic. The botanical and purely pharmaceutical sections are of great interest, and the whole work fully justifies the expectations one would form with regard to any of Professor Heckel's works.—*British and Colonial Druggist*.

To Obviate the Ammoniacal Odor of Bromide Solutions.—Ducing (*Rep. de Pharm.*) states that whenever a solution of the three usually employed bromides (of potassium, sodium and ammonium) is prepared in the cold, the liquid obtained disengages a distinctly ammoniacal odor; and it is easy to demonstrate the presence of free ammonia by means of a glass rod moistened with Nessler's reagent. The same phenomenon is produced by bringing an ammoniacal salt into contact with alkaline iodides or with strontium bromide and iodide. The disengagement of ammonia is evidently due to the alkalinity of the bromides or iodides employed.

According to the author's investigations, the quantity of ammonia is very slight, and the therapeutic value of the medicaments is but slightly diminished. To obtain solutions not disengaging an ammoniacal odor, he dissolves the salts in a small quantity of distilled water, and brings this concentrated solution to ebullition for a minute. The volume of the solution is then made up with the remainder of the water prescribed.

Strychnine a Cumulative Poison.—Everything in the way of evidence goes to prove that strychnine, diffused through the tissues, undergoes no change. It is diffused widely through the tissues, and, so diffused, it causes the most determinate effects; it leads the muscles to assume tetanic contractions attended with intense pain. It does not touch, apparently, the sensory system at all, but it strongly excites the motor nerves, or it acts directly on the muscular fibre, we know not correctly which, but it undergoes no change in itself. It remains in the body unaffected in composition, and it even resists in the dead body the process of decomposition of tissue. It happened once, in the course of a great trial, that the remains of a dog that had been poisoned by strychnine were extracted from the earth after burial for three years, and were examined by another observer and myself for strychnine. We found in this debris the evidence of strychnine, as if the animal had not been dead an hour. The strychnine had produced all its fatal effects by its presence, remaining itself intact. It would be possible to extend these comparisons to atropina, to canabina, and to the majority of the organic substances which we employ in medical practice, when they are stripped of their extraneous surroundings; but the illustrations given are all sufficient to make obvious what may be called physiological modification, or more properly, perhaps, physiological catalysis.—Dr. W. B. Richardson in *The Hospital*.

Reactions of the Alkaloids and of Acetanilide.—Tafel has pointed out that anilides, such as acetanilide, give a reaction with sulphuric acid and an oxidizing agent

which resembles the strychnine reaction. Fluckiger has drawn attention to a similarity between the reaction of morphine with sulphuric acid, containing nitric acid, and that of acetanilide with the same reagent. Schar has tested both these statements; he finds, with respect to the strychnine reaction, that this differs in two main points from that yielded by acetanilide. (1) The play of color shown by strychnine is from blue to methyl violet, whereas that exhibited by acetanilide is rather a blue-purple-red coloration. (2) The introduction of the oxidizing agent into the solution of strychnine in sulphuric acid induces a deep violet color, which gradually changes—through cherry-red, purple-red and blood-red—to yellow-red, while in the case of acetanilide there is a rapid change from purple red, through violet-red, into a dirty blue-green, olive-green, or brown green.

The reaction of sulphuric acid, containing nitric acid, on morphine and on acetanilide is certainly very similar; but acetanilide gives no reaction with sulphuric acid which contains selenic acid, titanous acid, molybdic acid, or tungstic acid, and thus should not be taken for morphine. Furthermore, morphine gives a deep red-brown color with sulphuric acid and bismuth subnitrate, while acetanilide gives a dark yellow color, becoming carmine-red at the edges of the mass.

Preservation of Sublimate Solutions.—L. Vignon (Pharm. Journ. 1894; No. 1266; p. 251). Continuing his work on this subject, the author points out that the decomposition of sublimate solutions is principally due to the alkaline substances in the water employed or in the glass of which the recipients are formed,—a limited quantity of such alkaline matter sufficing to cause the precipitation of a relatively considerable amount of mercury. On the other hand, hydrochloric acid and alkaline chlorides increase the stability of such solutions,—the first by saturating the alkaline precipitants, and the chlorides by their solvent power.

As the result of a series of experiments, he finds that ammonium chloride prevents precipitation by ammonia or albuminoid matter in the water, but fails to prevent the action of soda or sodium carbonate. Sodium chloride, on the other hand, fails in the case of ammonia and soda, but prevents precipitation by sodium carbonate and albumin. By combining the chlorides of ammonium and sodium, therefore, precipitation by any of the substances mentioned is prevented, as well as by hydrochloric acid. The two formulæ recommended are as follows:

I.

Mercuric chloride.....	1 gm.
Ammonium chloride.....	20 gm.
Sodium chloride.....	10 gm.
Distilled water.....	1 litre

II.

Mercuric chloride.....	1 gm.
Hydrochloric acid (22° Be.).....	1 c.c.
Distilled water.....	1 litre

:o:

FOR INTERCOSTAL NEURALGIA.

Linimenti bel'adonna.....	f 3 j.
Linimenti chloroformi.....	f 3 iv.
Linimenti opii.....	ad f 3 iij.

To be well rubbed over the painful area.

:o:

The Stearoptene of Cassia Oil.

Schimmel & Co. have recently succeeded in isolating cassia oil stearoptene, a substance for which they have been on the lookout for many years. This stearoptene was first discovered by Rochleder in 1850 and afterwards investigated by him

in conjunction with Schwarz. According to this investigator the substance possessed the formula $C_{21}H_{34}O_6$.

The substance investigated by Schimmel & Co. crystallizes out from alcohol in large hexagonal tables with oblique sides. These crystals are of a weak, somewhat disagreeable odor, and a pale yellow color. They melt between 46–47° and boil between 160–161°, of 12 mm. pressure. The substance dissolves easily in almost all the usual solvents, somewhat less readily in petroleum-ether, and is very sparingly soluble in cold water. When kept exposed to the action of light and air it decomposes, assuming a dark color and developing a pungent odor.

The stearoptene exhibits all the properties of an unsaturated aldehyde. According to investigations its composition is as follows: $C_8H_8 < \begin{matrix} OCH_2 \\ CH=CH-COH \end{matrix}$ (1)

It may be regarded as the aldehyde of β -methylcumaric acid. As an aldehyde the stearoptene forms of crystalline combination with bisulphite of sodium. With phenyl-hydrazine it forms a hydrazone, which occurs in yellow crystals, melting at 116–117°. When suitably treated with hydroxylamine it yields an oxime melting at 125–126°.

Melted with caustic potash, the substance yielded salicylic acid, oxidation with permanganate of potassium (which took place very readily), produced methylsalicylic acid, and oxidation with moist oxide of silver, β -methylcumaric acid.

After having determined its composition, Schimmel & Co. succeeded in preparing the aldehyde synthetically by the condensation of methylsalicyl aldehyde and acetic aldehyde with soda-solution. The synthetic product obtained by this process possessed all the properties of the natural aldehyde, and could not be distinguished from it, either chemically or physically.

:o:

A Dangerous Experiment.*

An explosion occurred in a drug store in this city recently, resulting in an injury which came near to the destruction of the eyesight of the person injured.

A druggist was experimenting on the action of ammonia water with oxide of silver, and had left the mixture in a porcelain capsule covered with water and a glass stirring rod in the capsule.

A salesman coming into the store thoughtlessly took up the rod and without agitation was replacing it in the capsule when a violent explosion occurred, shattering the capsule, pieces of which struck him in the face, causing damage which it was feared would result in the loss of one or both eyes. Prompt and skillful treatment, however, warded off the threatening mischief, and no permanent injury resulted.

The product obtained by the action of ammonia on silver oxide, known as "Berthollet's Fulminating Silver," is a dangerous article. When dry it explodes violently on the slightest percussion, or even when touched with a feather. The black crystals having a metallic lustre decompose violently with detonation when the liquid containing them is shaken.

The exact composition of the compound has not yet been ascertained.

:o:

Cold That Burns.

Burning is usually associated with heat, and it seems a misnomer to speak of cold

* American Journal of Pharmacy.

burns. Chemists tell us that there is really no such thing as cold, which is relative heat, and that the lowest temperature yet registered is some degrees above absolute cold.

At the last meeting of the Swiss Society of Natural Sciences at Lausanne, M. Raoul Pictet gave some particulars concerning cold burns experienced by himself and assistants during his investigations of the lowest temperature attainable. There are two degrees of burns. In one case the skin reddens at first and turns blue the following day, and subsequently the area of the spot expands until it becomes nearly double its original dimensions. The "burn," which is usually not healed until five or six weeks after its occurrence, is accompanied by a very painful itching on the affected spot and the surrounding tissues. When the burning is more serious, produced by longer contact with the cold body, a burn of the second degree is experienced. In this case the skin is rapidly detached, and all parts reached by the cold behave like foreign bodies. A long and stubborn suppuration sets in, which does not seem to accelerate the reconstitution of the tissues. The wounds are malignant, and scar very slowly in a manner entirely different from burns produced by fire.

On one occasion, when, M. Pictet was suffering from a severe burn due to a drop of liquid air, he accidentally scorched the same hand very seriously. The scorched portion was healed in ten or twelve days, but the wound produced by the cold burn was open for upwards of six months. In order to try the effect of radiation, in dry cold air, M. Pictet held his bare arm up to the elbow in a refrigerating vessel maintained at 105°, when a sensation of a peculiarly distinct character was felt over the whole skin and throughout the muscles. At first this sensation was not disagreeable, but gradually it became decidedly so, and after three or four minutes the skin turned blue and the pain became more intense and deep seated. On withdrawing the arm from the refrigerator at the end of ten minutes a strong reaction was experienced, accompanied by a superficial inflammation of the skin.

:o:

The Dose of Antipyrin.

A therapeutics committee of the British Medical Association recently reported on the dosage of the more common antipyretics, including antipyrin, in regard to which the conclusion was that the dose should not exceed 10 grs. Dr. McCall Anderson now writes to the British Medical Journal regarding the matter, pointing out that this must not be taken as a hard-and-fast rule. In support of his assertion he mentions three cases of epileptic children to whom antipyrin was given for the relief of pain. In one case the doses given were increased until they reached 25 grs. thrice daily, in another 45 grs., and in a third 50 grs. No really serious effects resulted. The chief thing to note is that the initial dose must be small—5 grs. for an adult, increasing as it loses effect. Dr. Anderson says in summing up:—"Antipyrin is not the dangerous drug which some observers have led us to suppose. In large doses it often yields surprisingly good results, and in chorea it is the only medicine from which cures may confidently be anticipated."

Kings County Pharmaceutical Society.

The usual monthly meeting of this society was held on December 11, at the Brooklyn College of Pharmacy, 399 Classon avenue, Brooklyn. In the absence of the president, F. H. Pamphilon, vice-president, took the chair. After the minutes of the last meeting had been read, an election was held to fill two vacancies on the Board of Trustees, which resulted in the nomination and election of R. C. Werner and A. E. Marsland. General trade matters were then discussed, after which the Chairman introduced Prof. H. W. Schimpf who delivered a brief but interesting address on methods of estimating cod liver oil emulsions.

The Estimation of Cod Liver Oil Emulsions.

By HENRY W. SCHIMPF, Ph.G.

In my analyses of cod liver oil emulsions, remarked the speaker, I invariably use the Soxhlet extraction apparatus. The method employed is as follows:

The emulsion is thoroughly shaken. Two grammes are then weighed out and completely absorbed with white filtering paper, in small pieces, which are then introduced into a wide test tube, having a perforated bottom, and the whole placed into the receiver of the extraction apparatus shown.



SOXHLET EXTRACTION APPARATUS.

The upper end of the receiver is connected with an upright condenser, while to the lower end is attached a tared flask which communicates by means of a glass tube with the condenser. The flask is about half filled with strong ether or benzine, and heated on a water bath. The vapor of the solvent rises through the tube to the condenser, and the condensed ether drops into the perforated tube containing the emulsion. The latter being spread over the filtering paper, presents a larger surface to the action of the solvent, and is rapidly exhausted of its oil as the ether or benzine percolates through it. When sufficient ether is condensed to fill the receiver to the level of the top of the siphon tube, which connects the receiver with the flask below, the ether runs back into the flask, charged with part of the oil, and is again distilled, condensed, and returned to the flask laden with more of the oil. This process is repeated until the oil is completely exhausted. The flask is then detached, the solvent evaporated or distilled off, and the oil is left. The increase in weight of the flask is the weight of the oil which was extracted.

Another method, which can be employed for this estimation was given by Professor Schimpf as follows:

Fit a large test-tube with a cork provided with a wash-bottle arrangement. Introduce into this tube 2 Gm. of the emulsion and about 10 Cc. of ether, close with a good cork, shake the tube for five minutes, and set it aside so that the liquids will separate. Then insert

the cork having the wash-bottle arrangements and by blowing into the shorter tube, draw off the supernatant ethereal solution. Repeat the process with successive portion of ether until the oil is completely extracted. Then mix the ethereal solutions and evaporate or distill off the ether, and weigh the residual oil.

The oil is known to be completely extracted when a few drops of the last portion of the ether drawn off, leaves no residue upon evaporating on a watch glass. This latter method, because of the simplicity of the apparatus required is well adapted for the use of the pharmacist. It requires, however, more ether than the other method, but this may all be recovered by means of an easily improvised still. Benzine which boils to the last at 45° or 50° C. and leaves no residue, may be used, instead of stronger ether.

Eight samples of cod liver oil emulsions were exhibited and specimens of each were examined under microscopes. Professor Schimpf's analysis showed that one emulsion which the makers claimed to contain 50 per cent. of oil contained only 25 per cent. and another for which no claims are made, but which is generally understood to contain 50 per cent., contains only 30 per cent. The emulsion which showed up to greatest advantage under microscopic examination, and which presented the best appearance, was one made by Wm. P. De Forest. Referring to this emulsion and his mode of preparing it he spoke as follows:

Cod Liver Oil Emulsion.

By Wm. P. De Forest.

The speaker said that while the result shown this afternoon so far as it referred to his own emulsion was gratifying, it had by no means taken him by surprise "it only confirms" he said, "the investigations, made by myself and others, extending several years back, as far back in fact as the meetings of the original New York and Brooklyn and the National Formulary Committees, on both of which I represented this society. The same emulsions which were poor emulsions then are poor to-day, and the one that shows so good to-day, namely, my own, was good then. Several times since have I examined microscopically the various emulsions of the market, and in not a single instance have I found them to compare favorably with mine, for in most of them the large globules of oil show up very plainly just as you see to-day under these microscopes. I am free to talk in this manner about my own emulsion, Mr. Chairman, because in the first place, it proves, as I have so often asserted, that retail pharmacists are better off when they make their own preparations than when they depend upon wholesale manufacturers for their supplies, and in the second place this successful emulsion is not due to any secret method of preparation or secret formula or to any particular skill, but what is possible to any retail pharmacist. I have given the formula several times in the meetings of this association, also to individual members and to the classes in the college when lecturing to them.

"The main reason of the thorough emulsifying of the oil is the use of the particular machine, or rather instrument, which as you are well aware is a vaginal syringe.

"The theory as we all remember about an emulsion is that the globules of oil must be surrounded with a film of some kind of mucilage, which prevents them from coalescing again, and the smaller

the globule which can be enveloped with this film of mucilage the more perfect the emulsion will be and the nearer does it approach to that natural emulsion, milk. The fine holes in the bottom of syringe or the excessive agitation which the mixture receives as it is drawn in and pressed out of the syringe breaks the oil into minute fragments much better than it can be done by any other method or instrument that I know of.

"The formula for my emulsion and the method for making it is as follows:

Pulv. acacie.....	3 iiiss
Pulv. sacchari alb.....	3 vi
Ol. morrhuae.....	3 xxii
Ol. gaultheriae.....	3 ii

Place the powders in a bowl or large mortar and mix the oils with them by means of a pestle, then add at once

Aqua..... 3 xvi
in which has been previously dissolved

Calcia hypophosphite.....	3 iv
Sodii hyp. phosphite.....	3 iv

Plunge the syringe into the mixture and work it vigorously. The effect will be apparent at once, and in five minutes or less the whole amount will be emulsified, then add at once:

Aqua..... 3 xi or q. s. to make 3 64.

Strain through cloth and bottle.

"This makes a white emulsion and the one great thing in its favor is that it is very fluid and will not separate. I regard gum arabic as the best emulsifier for cod liver oil. I find, however, that the acacia we are receiving of late years is not so good as that we formerly received, and we now have to use about twice as much of this emulsifier as formerly. Two ounces of gum arabic used to be sufficient for the emulsification of thirty-two ounces of oil, but now three and a half ounces are required to do the same work. Of course we all know that no true gum arabic has come to this market for many years, and except such small lots as remained in stock at the outbreak of the war in Egypt, scarcely any one has been able to obtain the true gum. This has caused the substitution of other varieties of acacia, which the apparently inferior to the gum of the pharmacopœia.

"In regard to mucilage of Irish moss you can never make a desirable emulsion with it. The globules will always show large, the same as is seen in the specimens before you. The only reason why chondrina was considered worthy of a place in the National Formulary was on account of its cheapness as compared with gum arabic. The formula given here will yield a handsome profit and give the best satisfaction both to the dispenser and the customer.

The next subject of discussion was:

Elixir of Three Phosphates.

By LUTHER F. STEVENS.

The author stated that having promised at a previous meeting to show an Elixir of Three Phosphates, prepared after the formula of Professor Patch, he would offer for comparison this along with the sample shown last month by O. A. A. Rouillon, the formula of which letter was printed in the AMERICAN DRUGGIST for November 25.

Samples of three elixirs made after Patch's formula were passed around for examination. Sample labeled No 1 was prepared in strict accordance with the formula devised by Patch, while the others varied only in respect to flavor.

Contrasting Patch's formula with Rouillon's, the speaker drew attention to the fact that here were two formulas, each producing actual phosphates, but made by different methods and differently held in solution. Of course something else was linked

with the phosphates to give solubility. Patch decomposed solution of chloride of iron (1880), with concentrated ortho phosphoric acid, dissolving in that liquid the alkaloids freshly precipitated. The reaction produced phospho chlorides and some free hydrochloric acid.

Rouillon's process consists in decomposing the salts of the alkaloids by ammonium phosphate in excess, citric acid and boric acid, forming ammonio-citro-boro phosphate with phosphate of iron (1880) dissolved in the solution (citro sodic ferric phosphate).

A paper was then read on

Elixir Pepsin, Bismuth and Strychnine.

By O. A. A. ROUILLON.

The precipitation of strychnine which sometimes took place in the elixir made after the N. F. formula was prevented in this, the author said, and the elixir besides was more palatable and agreeable. The formula follows:

ROUILLON'S MODIFIED FORMULA.

Strychnine sulphate..... $\frac{1}{2}$ grains.
Pepsin.....128 grains.
Bismuth and ammonium citrate.....256 grains.
Tartaric acid.....138 grains.
Water of ammonia.....a sufficient quantity.
Glycerin.....2 fluid ounces.
Alcohol.....5 fluid ounces.
Syrup.....3 fluid ounces.
Compound elixir of taraxacum.....1 fluid ounce.
Water enough to make.....16 fluid ounces.

Dissolve the pepsin in three fluid ounces of water. Dissolve the tartaric acid in one fluid ounce of water; and to the solution so formed add water of ammonia until the acid is neutralized. In this solution dissolve the bismuth and ammonium citrate and the strychnine sulphate; then mix the two solutions and add the glycerin compound elixir of taraxacum, alcohol and syrup. Lastly filter through a wetted filter, adding enough water to make the filtrate measure sixteen fluid ounces.

Irish Moss.*

By THOMAS S. WIEGAND.

A little town, known as Jericho, in Massachusetts, seems to be the center of this industry. We gather these notes from a paper which was printed lately in the Boston Herald.

Boys, men and women all engage in the work, which consists in spreading it upon better quality than the ratoons, and the ratoons in each succeeding year are in-ginger," the inferior variety, can be the beach prepared by raking all the dirt, stones and driftwood away, and leaving a fine bed of white sand; when the weed is first brought in by the boats, each of which gets about a barrel and a half, it is taken upon creels, a sort of barrow, and spread out upon the beach; it is turned over daily as in hay-making, for the space of two weeks; each morning it is washed in clean sea-water (fresh water ruins it); it is then gradually bleached, as when first gathered it is of a light-green color, and in the course of a few weeks becomes successively red, pink, and finally nearly white.

Stormy weather is a great drawback to the mosser's work. Some of the moss that the storms tear loose and scatter upon the rocks is gathered and classed as hand picked, bringing generally a quarter or one-half cent per pound more than that gathered in the usual way for commerce.

Should a spell of rainy weather come on during the season of gathering, heavy

unbleached muslin covers are used to protect the moss, which is packed up in heaps.

Two crops are obtained each year, the first one being the better; the late crop is liable to be injured by a little black vegetable growth called glut, caused, it is said, by the warmer water of August days.

—:o:—

Report on Ginger Crops in Jamaica.*

By WILLIAM FAWCETT,

Director of the Botanical Department.

The quality of commercial ginger upon which the price depends is due chiefly to soil, but also to curing, to the variety, white or blue, and to whether it has been freshly planted a few months before or has been "ratooning"† for one or more years.

The soil which produces the very highest quality, realizing perhaps £10 per cwt. in London market, is the very deep black soil of the virgin forest.

Magnificent trees, six feet in diameter, may be seen in some districts lying rotting on the ground, while the ginger cultivators have gone further to the center of the island, abandoning the woodlands already cut down. The plan adopted in cleaning the forest is, for a cultivator to invite 10 to 12 of his friends to a "cutting match"; provides food and drink, and the laborious work of felling trees is carried on merrily and without much expense. Afterwards fire is put, and the place is burnt over. This burning is considered very important, as much so as the virgin soil. Probably its importance is due principally to the deposit of potash and other mineral matters contained in the ashes, but the fire will also sweeten the ground, correcting sourness, and moreover it destroys insect pests. Some cultivators will only grow ginger in freshly-cleared woodland and next year they move on to a new clearing, but although in this way they get very fine ginger, it is at the expense of forest land which would require a very heavy outlay and perhaps a term of a hundred years to restore. Albert Town was not so long ago a center for the cultivation, but I was told there that growers had already got as far as fourteen miles further inland.

Ginger can be and is grown in many places year after year on the same ground. An intelligent cultivator at Borobridge stated that he knew of ginger growing for forty years in the same patch.

Seaford Town is a German colony, and one of the original colonists, Somers, an active old man 86 years of age, has been cultivating ginger and arrowroot there since his youth; he and the other colonists have been in the habit of planting a small patch one year, leaving it to ratoon as long as it was profitable, then throwing it up or growing other plants until after a term of years they again plant the same patch with ginger. This is an irregular rotation of crops. "Plant ginger," the produce of planting, is of inferior quality. When the ground is too poor to grow "white ginger" then "blue" is grown.

More depends upon the curing of ginger, considering the raising of the crop as a means of making a livelihood, than soil. At Seaford Town there was a wet season about two years ago, the

people could not dry the ginger in the sun, it mildewed, there was consequently very little sale, and the cultivators suffered some distress. I believe from what I saw that, as a rule, careful attention is given to the curing, and that the badly cured ginger brought sometimes to market is due to wet weather rather than to want of care.

It is difficult to make any recommendations on the subject, but the following hints may indicate what points are worthy of consideration by the cultivators. The first is the application of manure. There is a prejudice against its use, some maintaining that it breeds worms, and there is a difficulty also in getting it in any quantity. It is probable that those who have not succeeded with manure have used it improperly by applying it fresh or not sufficiently mixed with soil. As to obtaining it in quantity, example should be taken from the Chinese laborer, who preserves every particle of matter that can in any way be utilized as manure, not only cattle manure, but decaying matter of any kind, night-soil, etc., even soapy water left after washing is most useful. To imitate the formation of forest soil, a pit should be filled with alternate layers of bush and manure, everything in the nature of manure or decaying matter should be thrown in, and a layer of soil directly over the manure would be useful. The pit ought to be lined with clay to prevent the very valuable part of the liquid of the manure from escaping, and a cover or some kind, e. g., a sheet of corrugated iron, should be fixed in some way over the pit to keep out rains. I noticed several head of cattle in the Seaford Town district, and apparently the manure is lost, because the cattle wander about in search of food. Possibly grass or clover might be grown in old ginger grounds, and the cattle tethered so as to confine them in one place and the manure easily collected.

To facilitate curing and even sometimes to save the crop, the chief storekeeper in a district, who buys the ginger, might find it advantageous to himself and the people to invest in an American evaporator and dry the ginger artificially.

Possibly the Government could take steps through the Surveyor-General to prevent the forests from being ruthlessly destroyed.

The export of ginger is, on the whole, on the increase, as seen from the following table, but if this is accompanied by the gradual destruction of woods and forests it is not a subject for congratulation.

Year.	Cwt.	Value.
1887.....	9,927	77,789
1888.....	10,722	1,463
1889.....	8,952	17,615
1890 (one half year).....	4,948	11,183
1891.....	10,885	24,193
1892.....	6,272	47,661
1893 ..	13, 32	27,264
1894.....	14,932	44,796

—:o:—

Aluminum for Laboratory Apparatus.

A paper by Bornemann has recently appeared in the *Berichte*, dealing with the advantages of aluminum compared with other metals for laboratory work, especially copper. It is remarkable for its resistance to the action of sulphuretted hydrogen, moisture, sulphuric, nitric, and organic acids. It is a good conductor of heat and electricity. It is well suited for water-bath work and the like, but should not be used for high temperature work, as it softens at 500° C.

* From Bulletin of the Botanical Department, Jamaica. Vol. I. Part 6.

† Ratoon ginger is that which has grown on the same ground for two or more years.

* *American Journal of Pharmacy*.

French Prescriptions and How to Dispense Them.*

It is, perhaps, not a very frequent occurrence for the average dispensing chemist, not professing to make a specialty of such matters, to be asked to dispense a French prescription, and when such an event does take place it is more than likely that he feels himself under the necessity of declining to undertake its preparation, under the impression that the method of prescribing in France is something quite different to what he has been accustomed to. But there is really no reason why this should be so. With the, at least, elementary knowledge of the French language that the great majority of pharmacists possess, and the now almost universal familiarity with the metric system of weights and measures, the matter ought to present little or no difficulty. It is scarcely necessary to remark that the assistance of a Codex is indispensable, or some work showing the difference in strength between preparations bearing the same name in both countries, and as these sometimes vary very considerably, this is a point of some importance. The preparations differing widely from anything found in the B. P., as, for instance, some of the elaborate "sirops," "alcoolats," or "electuaire" (the "electuaire thérapeutique" is an amazing compound of between 50 and 60 ingredients) might, perhaps, be calculated to trouble an English dispenser, but it will be found that the fairly typical examples given below contain scarcely anything that he would not be able to supply.

A CHARACTERISTIC SPECIMEN.

Almost the only point of difference in the actual method of putting together a prescription is that in France the practice of measuring liquids is unknown. In compounding a mixture the bottle is first tared (small shot are very convenient for this purpose) and the ingredients weighed into it, the conventional order being first the solids, next liquids, and finally the vehicle. The following may be taken as a characteristic specimen of a mixture:

Sirap d'écorces d'orange Amères.....	50.0
Cognac.....	50.0
Extrait de quinquina.....	6.0
Eau gommeuse.....	150.0
A prendre par cuillerées.	

This mixture illustrates two frequent peculiarities of the French system. In the first place, if the quantities ordered are accurately dispensed, it will be seen that the resulting compound will not fill a bottle of any size made, and it would therefore have to be sent out in a 250 gramme bottle not quite full, a most objectionable feature to English eyes. This is constantly happening, though more often caused by differences in the specific gravity of the liquids than by the awkward quantities prescribed. The other peculiar feature about the prescription is the laconic directions—take by spoonfuls—a phrase in very common use.

WHERE MINUTE INSTRUCTIONS ARE GIVEN

The directions given for use, however, are not always so vague as the above, and the medical man will not unfrequently give the most minute instructions. The following is an example:

Iodure de sodium.....	2.0
Eau.....	60.0

Pendant les vingt premiers jours de chaque mois pendant trois mois, prendre dans un peu de lait, immédiatement avant les repas, deux fois par jour, une cuillerée à café de la solution suivante.

*From the "British and Colonial Druggists' Diary" for 1895.

During the first twenty days of each month, during three months, take in a little milk, immediately before meals, twice a day, a teaspoonful of the following solution.

Half a drachm of iodide of sodium dissolved in two ounces of water, would be nearly equivalent to the solution, but there can be no difficulty in weighing the ingredients in the orthodox way.

The next illustrates the favorite custom, not much known in England, of prescribing powerful remedies, especially arsenic, in the form of drops.

(1.) Prendre a déjeuner et a diner quatre gouttes de liquer de Fowler.

(2.) Oindre les regions malades avec la pommade suivante.

Glycér d'amidon.....	100.0
Acid borique.....	2.0
Oxyde de zinc.....	2.0

The "Liquer de Fowler," which differs only from our liq. arsenicalis in its coloring and flavoring matters, would be sent out in a small drop bottle. As to the ointment, the glycère d'amidon is similar to our glycerine of starch, while the other ingredients are sufficiently obvious.

The very neat and convenient cachets, now pretty well known in this country, are much used, and form a very pleasant means of administering such powders as the following:

Au commencement de chaque repas, prendre un des cachets suivants:

Charbon.....	} ss. 0.01
Magnésie.....	
Poudre de noix vomique.....	
Poudre d'opium.....	0.02

Pour un cachet. Faire 20 semblables.

In large establishments a small machine is employed for filling these cachets, but where they are not much in demand, this is done by hand, a camel-hair pencil being used for closing them.

The formula for pills will usually present no difficulty. They are usually prescribed of a very small size. The second part of the next prescription, however, contains two drugs, probably unfamiliar to English readers.

Pilules avec.

Ext. d'aconite.....	0.03
Ext. de belladone.....	0.01

Pour une pilule. Une pilule le soir avant de se coucher.

2

Prendre dans une tasse d'infusion de bourgeons de sapin, dans la matinee, une cuillerée à soupe du sirop suivant.

Benzoate de soude.....	15.0
Sirap de capillaire.....	300.0

"Capillaire" is maiden-hair fern, and the "bourgeons de sapin," pine tops. Of the latter, a suitable quantity would be supplied the patient to make the infusion as required, or he might be given the infusion ready prepared. It may be mentioned here that under the name of "Especes," mixtures of various dried leaves, roots, etc., are frequently ordered for the preparation of "tissanes." The ingredients are cut up of an uniform fineness and sent out in packets. Here is a simple one:

Feuilles de mélisse.....	} ss. 30.0
Feuilles de menthe.....	
Racine de valerian.....	

Selon avis.

Liniments, lotions, etc., call for no special remark. It will be noticed that a very favorite preparation of opium, Sydenham's laudanum, occurs in both the formulæ here given.

Huile de jusquiame.....	80.0
Chloroforme.....	20.0
Laud. de syden.....	20.0
Extrait de belladone.....	6.0
Huile camphrée.....	60.0

Matin et soir, frictionner les genoux et toutes les parties douloureuses.

Oil of hyoscyamons is prepared by heating the leaves with olive oil over a slow fire. Several such medicinal oils are in use.

Eau de roses.....	200.0
Laud. de sydenham.....	4.0
Teint de cachou.....	4.0
Sou-acétate de plomb.....	2.0
Sulphate de zinc.....	1.0

Faire trois injections par jour.

A prescription for suppositories may be added:

Acide tannique.....	5.10
Azorange benz.....	5.30
Cire blanche.....	0.50
Beurre de cacao.....	7.50

Fondez et divisez en 12 suppositoires. Une le soir.

They would probably be made in France in the old-fashioned method, by means of paper moulds embedded in sand, these being sometimes lined with tinfoil. In the example given the weight of each suppository will be found to be about the same as those used in this country, one gramme, but they are more frequently prescribed much larger, the official strength being 4 grammes.

HOW GARGLES ARE ORDERED.

The following is a prescription for gargle and spray:

Tous les matins et tous les soirs, se gargariser avec cette solution chaude.

Acide borique.....	10.0
Glycerin.....	100.0
Teint. de sumbul.....	50.0
Eau distillée.....	350.0

Après chaque gargarisme, faire une pulvérisation de cinq minutes avec.

Fluoridate de soude.....	0.4
Acide phénique floc.....	1.0
Eau distillée.....	100.0

The expression "pulvérisation," here meaning a spray, is the only thing likely to puzzle the uninitiated.

Among the more distinctively French preparations in common use may be mentioned the various syrups and medicated wines, proprietary and otherwise. Of these, and, indeed, of proprietary articles generally, the name is legion, and the ordering of them appears to be becoming more and more frequent. The official vin de quinquina, which occupies the place of our quinine wine, is very popular, and is much prescribed, either alone or with various additions. The taste for hypodermic medication has also developed very considerably of late.

—:0:—

BALSAM OF PERU IN DIARRHOEA.

[NUGGIA—Rev. des Mal. de l'Enf.]

Balsam of Peru gr. 3.
Alcohol 3 j.
Syrup of lemons 3 iv.
Water 3 iij.

COEZYA.

[HAVEM—Therap. Leist.]

Pure carbolic acid, 5 parts.
Liquor ammonia, 5 parts.
Alcohol, 10 parts.
Distilled water, 10 parts.

A few drops are poured on to blotting paper, and the vapor inhaled for a few seconds.

The B.P. Soaps.*

By W. H. MARTINDALE.

The author reported a series of experiments on the soaps of the B.P. with the object of ascertaining the amount of water and the percentage of alkali they contain. No such limits are included in the B.P., but the U.S.P. 1890 requires that Castile soap shall not contain more than 86 per cent. of water and a limit of alkalinity equal to 186 per cent. of sodium oxide, while a limit of alkalinity is also placed upon the Sapo kalinus of the German Pharmacopœia equal to 285 of potassium oxide. Mr. Martindale's experiments showed the following results:

further investigation, which is now being carried on vigorously. So far, it appears that the results arrived at by Lord Rayleigh afford a remarkable verification of the remarks made by Lord Kelvin, as the President of the British Association, in 1871, as to the importance of accurate and minute measurement, though it may seem to the non-scientific imagination a less lofty and dignified work than looking for something new. On that occasion it was pointed out that nearly all the grandest discoveries of science have been the rewards of accurate measurement and patient long-continued labor in the minute sifting of numerical results. This fact is illustrated by the mode in which Lord Ray-

air by absorption with metallic magnesium, and also by the old process adopted by Cavendish of passing through it electric sparks. The nitrous compounds, thus produced were then separated by absorption into a caustic alkaline solution.

:o:

Export Trade of Yezd, Persia.*

OPIMUM.

Of the exports of Yezd the most important is that of this drug. It was more largely grown in this province than anything else in comparison with their respective values. Various causes have lately conducted to a decided falling off in the cultivation of the poppy. In a good year the total output of Yezd was some 1200 cases, each case weighing about 180 lbs. An average output would be about 1000 to 1200 cases. In speaking of the opium of Yezd, I include not alone that only grown in the province, but also that produced in Khorassan, Tabbas, and even in the Herat district. The crude stuff is sent to Yezd, where it is manufactured. During the past year, viz., 1891-2, the crop has been but a small one. The prices ruling in China and London were low and not remunerative, consequently only about half the usual amount was sown in the Yezd district, and this more for speculative purposes than for anything else. To still further reduce the output, the crop for want of proper spring rains, was a practical failure. Hence, the maximum quantity of opium manufactured in Yezd was somewhat under 500 cases. 182 lbs. of the crude material in Yezd makes one case of 180 lbs manufactured article. Of Khorassan's crude material 195 lbs. make one case of 180 lb. A certain portion of the crop is specially manufactured for consumption in the local markets of the country and is almost entirely supplied by Yezd. It is made into sticks and is used for smoking and eating. Opium smoking is very prevalent in Yezd, and it is said that more is used in this place in that way than in any other town in Persia, with the single exception of Kerwan. This habit is gaining ground daily throughout the country. In years past adulteration of the drug was very common, but owing to many and heavy losses by having his cases thrown on his hands, or else being sold at 50 per cent. under current rates, the Persian merchant has in this case learnt wisdom, and has almost entirely discontinued the practice.

ALMONDS.

These are now mostly exported to Bombay, but in good years, i.e., when the European crop is not an average one, kernels, both sweet and bitter, are exported to England. Last year the export was about 1,040,000 lbs. This year there has been a very large decrease.

ASAFCETIDA.

There used to be an export of some 500,000 lbs. of this gum, about 150,000 lbs. being from Yezd and the balance from Tabbas, but owing to the way it was adulterated the price has greatly fallen, and in consequence the trade has nearly died out. In neither of the last two years has one-tenth of the amount been exported.

MADDER ROOTS.

Adulteration and a consequent declining market has also practically killed the export trade in this article, which used to be fairly large with Bombay. Prices have fallen from 1s. 8d. per 18 lbs. to 4d.

SAFFRON.

Saffron was sent into the Yezd market from Burugird and thence exported to

*British Consular Report.

		Total Fatty Acids.	Total Alkali (Na ₂ O).	Total Alkali (K ₂ O).	Free Alkali (Na ₂ O).	Free Alkali (K ₂ O).	Free Fatty Acid.	Silica.	Ferric Oxide.	Water, traces of Chlorides, Sulphates and Pigments.
Sapo animalis.....	1	65.01	8.65	....	nil	....	.1252	....	....	26.40
" "	2	66.17	9.81	....	nil	....	.1521	....	....	24.30
" "	3	64.99	8.15	....	.20%	....	.1818	....	....	26.19
" "	4	63.70	7.75	....	.2811	....	.2991	....	....	28.21
Sapo durus.....	1	66.66	7.236	....	nil	....	2.40	....	....	26.10
" "	2	63.90	7.57	....	nil	....	1.00	.13	....	30.13
" "	3	60.12	9.75	....	nil	....	.508	....	....	34.22
" "	4	66.32	10.30	....	.0825	....	2.361	....	....	23.397
Sapo durus (mottled)	1	65.37	8.03	....	.010	....	1.460	.262	.144	38.12
" " "	2	69.59	8.24	....	.038	....	.390	.310	.261	21.401
" " "	3	64.73	7.45	....	.175	....	.135	.146	.335	27.22
" " "	4	75.2	7.56	....	.1498	....	.111	.755	.292	17.685
Sapo mollis.....	1	49.31	....	11.13	....	.012	....	.315	....	38.781
" "	2	51.01	....	11.506	....	trace	....	....	....	37.042
" "	3	44.178	....	10.05	....	.421	.321	....	....	46.01
" "	4	49.25	....	10.87	....	.197	.507	....	....	39.777
" "	5	32.71	....	9.71	....	trace	.553	....	....	58.083
" "	6	49.06	....	7.01	....	.310	.421	....	....	43.741
" "	7	57.425	....	11.41	....	.5361	.3301	.557	....	31.670
" "	8	46.99	....	10.00	....	.486	.322	....	....	42.701

He acknowledged the assistance of Mr. J. O. Braithwaite in the work. The experiments had been made in Messrs Wright, Layman & Umney's analytical laboratory. In replying to a discussion, Mr. Martindale said the method used for estimating was to weigh and dry the sample, then dissolve in alcohol filter and estimate causticity of alcohol in filtrate, then wash thorough what remained on filter and titrate carbonated alkali with decinormal solution.

:o:

The Constitution of the Atmosphere.†

The popular interest excited by the announcement that a hitherto unobserved constituent of the atmosphere had been discovered by Lord Rayleigh, had no doubt considerably subsided since the meeting of the British Association at Oxford; but the statement made by the President of the Royal Society at the anniversary meeting, that he regards this discovery as "the greatest scientific event of the past year," will naturally awaken curiosity as to the results of the

leigh's discovery was arrived at, as a result of investigations originally undertaken with a view to testing the validity of Prout's hypothesis that the atomic weights of elementary substances are expressed by whole numbers. In the course of that enquiry the desirability of re-determining the densities of some of the principal gases became apparent, and that arduous work, undertaken by Lord Rayleigh in 1882, has been since continued with unremitting application. Among other gases operated upon, nitrogen was found to give rise to most unexpected and disturbing difficulties in obtaining concordant results as to the density of the gas obtained from different sources. The gas obtained by abstracting water vapor, carbon dioxide, and oxygen, from atmospheric air, proved to be slightly denser than the nitrogen gas obtained from nitric or nitrous oxides, or from ammonium nitrite. Hence it was inferred that atmospheric nitrogen is a mixture of nitrogen with a small proportion of some heavier gas, hitherto unknown. With the assistance of Professor Ramsay, Lord Rayleigh succeeded in isolating this gas. The methods adopted were to remove nitrogen from atmospheric

* Abstract of a paper read at a meeting of the London Chemists' Assistants' Association.

† The *Pharmaceutical Journal and Transactions*.

Bombay. Adulteration has produced the same result as in the previous cases.

—:o:—

Water-Analysis.*

The advice of druggists is often asked as to the purity of samples of water submitted to them, and it is desirable that they should be able to express an opinion one way or other. It were better, undoubtedly, that chemists and druggists should be able to take a water sample through a regular analysis, but there are comparatively few in the trade who have the training and the opportunity to do so. A complete analysis of water should include the following factors, at least:—

	In 100,000
(1) Color and suspended matter.....	clear
(2) Total solids.....	14.5
(3) Hardness.....	10.7
(4) Ammonia.....	0.0
(5) Albuminoid ammonia or organic nitrogen.....	0.002
(6) Chlorine.....	1.32
(7) Nitrates and nitrites.....	0.077

In many cases the dissolved gases are required, as well as a bacteriological, or, at least, microscopical examination. The figures which are given above represent the constituents of an average spring-water. They may be converted into grains per gallon by multiplying by 0.7.

The object of our printing the above particulars is to impress upon those who have not had practical experience in water-analysis, and its deductions, that the task is intricate and difficult. Any great variation upwards from the figures quoted would lead an analyst to suspect the quality of the sample. For example when chlorine exceeds 2 per 100,000, one may at once suspect probable contamination of the water with sewage or other organic material, if the water is not derived from a saline location, and this alone might suffice to condemn the water. So also the presence of nitrites in a sample suggests the decomposition of urea through the influence of micro-organisms, and again we should condemn the water, even though here also one simple test only had been used. In either case an intelligent chemist and druggist, who has given some thought to sanitation, should, by a few simple tests and inquiry as to the source of the water, be able to advise a customer whether the water is safe or not, and when it is a doubtful matter he can advise a more thorough analysis by an expert. In the latter case he should himself gather the sample (a Winchester-quart bottleful), and send it to a friendly analyst with such particulars as he already has regarding the sample, and the trouble the water is causing, or is suspected of causing.

The tests which may be applied at the dispensing-counter, are for organic matter, chlorides, nitrites, lead, and hardness. These cover most of the every-day demands, and the tests which we give are simple, and give approximately accurate results.

ORGANIC MATTER.

Put 5 drops of acid. sulph. dil. in a clean 2-oz. measure, and fill up with the water. Add liq. potass. permang. min. v., drop by drop. The color of the first drop should not quite disappear. If it does, try the nitrites test. Organic matter quickly decomposes potass. permang., and the more of the latter there is decolorized the more organic matter is present. It may be harmless, but it should not be there.

CHLORIDES.

Make a solution of nitrate of silver

$\frac{1}{2}$ gr. to 1 oz. of distilled water. Pour 10 oz. of the water sample into a measure, add a drop or two of potassium-chromate solution, stir and add silver solution $\frac{1}{4}$ dr. at a time, stirring the while, until a permanent orange precipitate begins to form. If the 10 oz. of water require more than one 1 oz. of silver solution, the source of the chlorides should be seen to.

NITRITES

In a clean 6-oz. stoppered white-glass bottle put about 5 oz. of the water sample and 5 drops of acetic acid. To this add about 5 drops of starch mucilage (a grain or two of arrowroot, made clear with 1 dr. of boiling water), and about 1 gr. of potass. iodid. Close the bottle and shake. If nitrites are present in large quantity a blue color will soon appear, and if it appears within twenty-four hours the water is bad.

LEAD.

Water contaminated with lead (from pipes, cistern, etc.) gives rise to lead-poisoning. Sulphuretted hydrogen (or solution of sodium sulphide), when passed through 10 oz. of the water, should not change the color of the water to brown in the slightest degree. If it does, suspect lead, and get a more crucial test applied.

HARDNESS.

Hard water is wasteful of soap and bad for boilers. When the hardness goes beyond a certain degree (say 20°) it may pay manufacturers to soften it with lime, and on this point a chemist and druggist should be able to give advice. The tests are simple. Two solutions are required, viz.:—Soap Solution, made by dissolving 19 gr. white hard Castile soap in shavings in 4 oz. of a mixture of spirit; filter if necessary, and dilute with distilled water to 8 oz. Lime Solution: Dissolve 3 gr. of precipitated chalk in just enough acid. hydrochlor. dil., and evaporate in a small basin to dryness. When cold dissolve the residue in 30 oz. of distilled water. 6 drams. of this solution and water 6 drms. should when taken in 3-oz. bottle with 2 drms. of soap solution, give a froth which does not disappear in half a minute. If less than 2 drams of soap solution is required the soap solution is too strong, and should be diluted with distilled water. Thus, if 100 minims give the froth, every 400 minims of the soap solution must be diluted to 1 oz. Each 2 drms. of the standard soap solution = 1° of hardness. To test a water put 6 oz. in an 8-oz. stoppered bottle, and add the soap solution 2 drms. at a time until the froth appears to be permanent. The amount of soap solution used indicates the total hardness. If the temporary hardness (due to carbonates, etc., precipitable on boiling) is required, boil 6 oz. of the water in a flask for half an hour, cool, filter, and make up to 6 oz. with distilled water. Again determine the hardness; that which remains is permanent, the balance is temporary.

These tests are a little bit rough, but they suit the purpose, and when applied with sound judgment give the results desired.

—:o:—

Chemistry and the Authenticity of Relics.

The present age takes nothing on trust, unless it be spooks and speculators. Legends are subjected to the "higher criticism" of the measuring tape, and traditions are tested in the laboratory with the "usual reagents." So strong is the stream of tendency in this direction that even

theology, which used to look askance at science, is now often fain to invoke its assistance. A curious manifestation of the zeitgeist in this respect is afforded by the action taken some time ago by the Bishop of Versailles, Monseigneur Goux, in submitting the famous seamless coat which is preserved as a relic in the Church of Argenteuil, and which, according to tradition, is stained with the blood of Christ, to examination by scientific experts. For this purpose he chose M. Philippe Lafon and M. J. Roussel, who were asked to furnish an answer to the following question: "What is the exact nature of the spots on the garment known as the Holy Coat of Argenteuil?" These experts in due course certified that they had made a chemical and microscopical examination of the "Holy Coat." After describing, in the ordinary way, the tests employed, they sum up as follows: "From the portion of the coat marked with rust-colored spots we obtained: 1. A faint green coloration, with the tincture of gualacum and the essence of turpentine. 2. The revival of the red globules of blood, with the artificial serum. 3. The formation of crystals of hæmin, or of chlorohydrate of hæmatin. These indications are sufficient to enable us to affirm the spots examined are actually due to blood—and to human blood. Judging by the whole of our analysis, we presume that this blood is very old."

—:o:—

Suggestions for the Pharmacy.

If there ever was an occupation requiring watchful care, it is that of the pharmacist. There are so many new remedies announced each year that get farther than the manufacturers' advertisements in the trade journals—yes, even so far as the druggists' prescription shelf. One by one these things accumulate, and, as time goes by, it becomes difficult in some cases to get reliable data referring to the dose, properties, solubilities of these once new remedies. The Pacific Druggists suggests a remedy for this.

If the druggist will trim a neat blank label and gum it on the back of each bottle, it says, he will find that he will need all of its space in which to write a few things down—details that will take care of themselves. The first thing to note down is the cost price per ounce. Then follows the selling price per grain or drachm. If the pharmacist will continue his statistics further, he should add the dose, usual and maximum, then the effects on the system, in one or two words—and we have plenty in the vocabulary to describe each therapeutic effect, by the way—giving also the incompatibles and solubility, concluding with an advisable vehicle.

It may be a year or two—yes, even longer—when these same facts, gleaned at the time from the books and journals, will be of great service to the dispensing. May be it will be a new clerk, or assistant, or the proprietor, who will be asked by a physician or patient the dose, effect, compatibility or solvent for this identical, yet out-of-the-way remedy. By embodying all this in a few words, and writing it on a small label on the bottle, the answer will always be at hand, and where it is most needed.

It is just these peculiar remedies that your physician may ask you about, and it is your business to furnish the information. He may doubtless know the therapeutic value and dose, yet inquire for its solubility and a pleasant method of administration. Every out-of-the-way chemical or preparation should be labeled.

* From the Chemists' and Druggists' Diary.

Some Perfume Formulas.

WHITE LILAC.

The Old Form.

Essential oil of almonds.....	℥v
Essence of civet.....	3 ℥j
Orange flower extract.....	℥vj
Rose extract.....	x
Tuberose extract.....	℥j

A few drops of liquor violæ converts this into "Lilac."

THE NEW FORM.

Terpineol.....	gr lxxv
Alcohol.....	℥iiss

Dissolve and add—

Oil of ylang-ylang.....	℥ij
Essence of ambergris.....	℥xl
Essence of musk.....	℥xl
Jasmine extract.....	℥vj
Jonquil extract.....	℥vj
Orange flower extract.....	℥vj
Rose extract.....	℥vj
Tuberose extract.....	℥vj

LILY OF THE VALLEY.

(1)

Extract of jasmine.....	℥xl
Extract of ylang-ylang.....	℥vj
Cardamom seeds (bruised).....	℥ij
Oil of orris.....	℥xx

Macerate for a month and filter.

If the odor of the cardamoms is found to predominate, add jasmine extract to neutralize it.

(2)

Essential oil of almonds.....	℥x
Essence of vanilla.....	℥x
Rose extract.....	℥x
Orange flower extract.....	℥x
Jasmine extract.....	℥iiss
Spirit of rose.....	℥iiss
Tuberose extract.....	℥xxj

WHITE POND LILY.

Essential oil of almonds.....	℥ij
Essence of vanilla.....	℥ij
Spirit of rose.....	℥ij
Jasmine extract.....	℥ij
Orange flower extract.....	℥ij
Rose extract.....	℥ij
Cassia extract.....	℥ij
Tuberose extract.....	℥viiij

This is simply a variation of lily of the valley, and often, in fact, goes by that name.

LYCEUM BOUQUET.

Oil of lavender.....	℥j
Otto of rose.....	℥j
Oil of bergamot.....	℥j
Oil of ylang-ylang.....	℥j
Essence of musk.....	℥j
Cassia extract.....	℥j
Violet extract.....	℥j
Jonquil extract.....	℥viiij
Reseda extract.....	℥viiij
Tuberose extract.....	℥viiij

MAGNOLIA BLOSSOM.

Oil of lemon.....	℥v
Essential oil of almonds.....	℥x
Orange flower extract.....	℥iiss
Rose extract.....	℥viiij
Spikenard extract.....	℥xiv
Violet extract.....	℥xiv

Mix, set aside for several days, and filter.

MARY STUART BOUQUET.

(1)

Ol. bergamot.....	℥ij
Extrait rose.....	℥xvj
Extrait jasmine.....	℥vj
Ess. moschi (3 j to 3 xvj).....	℥iv
Ess. ambergris (3 j to 3 xvj).....	℥ij
Ess. vanille (3 vj to 3 xvj).....	℥iv
Tr. Iridia flor (1 in 2).....	℥viiij
Alcohol.....	℥lxiv

(2)

Otto of rose.....	3 ss
Oil of sandalwood.....	3 ss
Oil of bergamot.....	3 j
Oil of neroli.....	3 ij
Tincture of benzoin.....	℥iv
Tincture of orris.....	℥iv
Tincture of Tonka bean.....	℥iv
Essence of civet.....	℥iv
Spirit of rose.....	℥iv
Cassia extract.....	℥iv
Jasmine extract.....	℥iv
Rose extract.....	℥iv
Violet extract.....	℥iv
Essence of musk.....	℥iv
Essence of ambergris.....	℥ij

MILLEFLEURS.

(1)

Oil of neroli.....	3 ss
Oil of cloves.....	3 j
Rose extract.....	℥vj
Jasmine extract.....	℥vj
Essence of vanilla.....	℥ij
Essence of musk.....	℥vj
Essence of ambergris.....	℥vj
Lavender water.....	℥xv
Orange flower water.....	℥xv
Cologne spirit.....	℥xviiij

(2)

Essential oil of almonds.....	℥iiij
Oil of cloves.....	℥ij
Oil of neroli.....	℥ij
Oil of bergamot.....	℥ij
Essence of ambergris.....	ss
Essence of musk.....	ss
Tincture of Tonka bean.....	ss
Rose extract.....	℥iv
Tincture of orris.....	℥iv
Cassia extract.....	℥iv
Orange flower extract.....	℥iv
Spirit of rose.....	℥iv
Jasmine extract.....	℥iv

MONA BOUQUET.

Benzoic acid.....	gr. vj
Oil of neroli.....	℥xx
Oil of cloves.....	3 ss
Otto of rose.....	℥j
Oil of bergamot.....	℥ij
Oil of sandalwood.....	ss
Essence of musk.....	℥ij
Tincture of orris.....	℥iv
Rose water.....	℥v
Alcohol to.....	℥ij

MUSK BOUQUET.

(1)

Otto of rose.....	℥xvj
Tincture of tolu.....	℥xvj
Essence of musk.....	℥xij
Jasmine extract to.....	℥iv

Mix.

(2)

Essence of civet.....	℥j
Spirit of rose.....	℥iv
Essence of musk.....	℥xj

Mix.

These essences are for retail as musk perfume, and are preferred for the handkerchief to the plain essence.

NEW MOWN HAY.

(1)

Oil of bergamot.....	℥xl
Oil of rose geranium.....	℥xl
Tincture of benzoin.....	℥x
Essence of musk.....	℥x
Spirit of rose.....	℥x
Spirit.....	℥x
Tincture of Tonka bean.....	℥xv

(2)

Vanillin.....	gr. j
Coumarin.....	gr. ij
Tincture of orris.....	℥ij
Spirit of rose.....	℥ij

(3)

Oil of neroli.....	℥x
Oil of rose geranium.....	℥x
Rose extract.....	℥x
Spirit of rose.....	℥x
Jasmine extract.....	℥x
Spirit.....	℥x
Tincture of Tonka bean.....	℥x

OPOPONAX.

(1)

Grain musk.....	℥j
Vanilla.....	℥viiij
Tonka beans.....	℥iv
Cologne spirit.....	℥x

Macerate for a month, and add to the filtrate—

Tincture of orris.....	℥iv
Millefleurs extract.....	℥viiij
"Citron zeste".....	℥ij
Oil of bergamot.....	℥ij
Otto of rose.....	℥iiss
Oil of opoponax.....	℥ss

(2)

Grain musk.....	ss
Vanilla.....	ss
Tonka beans.....	℥j
Spirit.....	℥xxv

Macerate for a month and add

Oil of citron.....	3 j
Oil of bergamot.....	3 j
Oil of citronella.....	℥xv
Oil of lemon.....	℥xv
Otto of rose.....	℥ij
Oil of patchouli.....	3 ss
Violet extract.....	℥xvj
Rose extract.....	x
Tincture of orris.....	x
Cassia extract.....	v
Orange flower extract.....	v

ORANGE-FLOWER BOUQUET.

Essence of musk.....	℥ij
Cassia extract.....	℥ij
Orange flower extract.....	℥xij

ESSENCE OF PATCHOULI.

Oil of patchouli.....	3 iiss
Otto of rose.....	℥xx
Jasmine extract.....	℥ij
Cologne spirit.....	℥j

For a cheaper essence omit the jasmine and dilute further.

MOSS ROSE.

(1)

Otto of rose.....	3 iiss
Essence of ambergris.....	℥iiss
Essence of musk.....	℥ij
Rose-water (triple).....	℥v
Alcohol.....	℥j

Mix, and allow to stand for at least a week before bottling.

(2)

Essence of civet.....	℥ij
Essence of musk.....	℥iv
Spirit of rose.....	℥j
Orange flower extract.....	℥j
Jasmine extract.....	℥j
Violet extract.....	℥j
Rose extract.....	℥j

TEA ROSE.

Tincture of orris.....	℥v
Spirit of neroli.....	℥v
Spirit of santal.....	℥x
Spirit of geranium.....	℥j
Spirit of rose.....	℥j
Rose extract.....	℥j

Sometimes an ounce of tincture of storax is added to each pint of this perfume with good effect.

WHITE ROSE.

(1)

Oil of patchouli.....	℥iiij
Oil of rose-geranium.....	℥x
Otto of rose.....	℥xxv
Tincture of orris.....	℥ij
Water.....	℥v
Alcohol to.....	℥v

(2)

Spirit of rose.....	℥iv
Violet extract.....	℥ij
Jasmine extract.....	℥ij
Essence of patchouli.....	℥ss

(3)

Spirit of rose.....	℥xvj
Rose extract.....	℥xvj
Violet extract.....	℥xvj
Jasmine extract.....	℥viiij
Oil of patchouli.....	℥x
Alcohol.....	℥iv

(4)

Oil of rose-geranium.....	℥xx
Otto of rose.....	℥j
Essence of ambergris.....	ss
Essence of musk.....	ss
Jasmine extract.....	℥ij
Rose extract.....	℥iv
Alcohol to.....	℥xvj

(5)

Rose extract.....	℥xiiiss
Violet extract.....	℥iiss
Spirit of santal.....	℥x
Jasmine extract.....	℥x

WOOD VIOLET.

(1)

Cassia extract.....	℥v
Rose extract.....	℥ij
Tuberose extract.....	℥ij
Violet extract.....	℥ij
Essential oil of almonds.....	℥xv

Mix. Add two or three dozen blades of grass or a little sap green. Macerate until the color is of the desired tint, and filter.

Oil of patchouli is sometimes used instead of essential oil of almonds.

(2)

Essence of musk.....	5 iij
Tincture oforris.....	5 iij
Cassia extract.....	5 iij
Violet extract.....	5 zvj

Mix.

YLANG-YLANG.

(1)

Oil of ylang ylang.....	℥x
Otto of rose.....	℥ij
Oil of neroli.....	℥x
Essence of musk.....	3 ss
Jasmine extract.....	3 iij
Orange-flower water.....	3 iij

Mix.

(2)

Oil of neroli.....	℥vj
Oil of lemon.....	℥vj
Otto of rose.....	℥xv
Oil of ylang-ylang.....	℥i
Essence of musk.....	3 ss
Alcohol to.....	Oij

Mix.

(3)

Essence of civet.....	5 iij
Jasmine extract.....	5 iij
Spirit of rose.....	5 iij
Spirit of ylang-ylang to.....	5 iij

Mix.

(8)

Oil of lemon.....	3 iij
Oil of bergamot.....	3 iij
Essence of musk.....	3 iij
English oil of lavender.....	℥xx
Oil of pimento.....	℥xx
Oil of neroli.....	℥xx
Otto of rose.....	℥x
Oil of cinnamon.....	℥ij
Essential oil of almonds.....	℥ij
Oil of caraway.....	℥ij
Grain musk.....	gr. v
Alcohol.....	5 viij

Allow to stand ten days and filter.—
Chemists' and Druggists' Diary.

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Formosa Camphor.*

A great variety of plants contain camphor, but the article of commerce known as camphor is chiefly obtained from the *Laurus camphora*, a tree which grows in Japan and the islands of the Eastern seas. The chief habitat of the tree, however, is the island of Formosa, where it reaches to its greatest size, and where most of the camphor of the Western commerce is produced.

THE ISLAND OF FORMOSA.

In addition to these supplies, a large quantity is shipped from Japan, but there is considerable difference between the produce of the two localities, the latter being of a lighter color, and of a pinkish hue, and also a coarser grain than that obtained from Formosa, and it also commands a higher price in the market—almost twice the amount as that from the island. Although the camphor tree, or shrub, is found in China, especially abounding in the eastern and central provinces, Chekiang and Kiangsi, very little is manufactured in that country, although very large trees are met with, some of them being 9 feet in girth, and the wood is an important item in the timber trade of Hankow. But in the island of Formosa the forest covers the line of mountains from north to south in those districts where the virgin vegetation has not given place to cultivation. The island of Formosa lies partly within the tropics. It is 210 miles in length, and 70 miles in width, and separated from China by the Formosa Strait, and the

position is such, as to render it a possession of importance for the Eastern trade. It has a fertile soil, and is extremely rich in minerals.

The island is inhabited partly by Chinese and partly by the aboriginal savage tribes. These are natives, sprung from the Malayan stock, and are confined to the mountain country of the eastern and southern districts, while the Chinese are limited to the western and a small portion of the north. Year by year the latter slowly advance in their search for camphor, but at great risk to themselves, as there is no friendly feeling between them and the natives. The trade has of late years been gradually decreasing owing to the great risk entailed in collecting, and from the fact that the extraction of camphor causes the destruction of the tree, and this has never been made good by replanting, so the forest becomes less and less, the Chinese advancing while the aborigines retreat. The mutual jealousy and encroachments between the two parties are considerable.

The sight of a virgin forest, such as these in Formosa, when once seen will not easily be forgotten. The trees grow to a height of about 50 feet, the leaves are of a bright shining green color, and when bruised give out the odor of camphor. The wood is much prized and sought after for carpentry and cabinet work, as it is white and very fragrant, which latter quality is considered to act as a deterrent to all kinds of insects. The tree has of late years been introduced into other countries, and may be found in the Parisian nurseries, and is occasionally met with in Great Britain.

METHOD OF COLLECTING THE GUM.

The method of collecting and preparing this substance differs considerably in the various countries in which it is found, and it is exceedingly pleasant and interesting to accompany the camphor merchants, although the expedition is attended by numerous risks in Formosa, as the work must be done in an enemy's country.

A careful selection of the trees is first made; those chosen as such possess an abundance of sap, for those which are dry are useless except for the wood, which in every case is secured, as it is in great demand. The camphor is prepared from such portions as the branches, roots, and refuse; these are taken freshly cut, and reduced to small pieces, so as to be suitable for distillation. This process is done by means of stills fixed under temporary erections on the ground; they are exceedingly rough and crude. A number of fires are then made, and over them is placed a long wooden trough or hollowed tree, coated with clay and half filled with water. Boards pierced with holes are then fitted on to the trough, and above these are placed rough jars containing the camphor wood. The mouths of these jars are then covered with inverted pots, and the joints made air-tight by various methods, mostly by hemp packing.

The fires being lit, in course of time the generated steam passes from the water through the pierced boards, and so saturates the wood contained within the jars, causing the sublimated camphor to settle in crystals on the inside of the pots. It is then scraped off, and undergoes other processes of distillation for the purpose of purifying the substance. Within a copper vessel a layer of earth containing lime is placed, and on this layer is deposited the crude cam-

phor. This again is covered by a layer of earth, and so alternately, until the vessel is full, the last layer being of course the earth. The whole is then covered with green mint.

A vessel formed of straw, covered on the outside with wet clay, is then put over the still and fixed. This combined apparatus is then placed over a fire and allowed to heat, and after a considerable time, left to cool.

The vessels are then opened and the camphor is found to have sublimed, attaching itself to the upper vessels. From these, it is scraped every few days, and is then very pure and clean. Camphor when pure, is a white brittle substance, forming octagonal crystals or square plates.

TRANSPORTATION.

For purposes of transport, camphor placed in large vats or tubs with holes at the bottom; through these holes passes an oily liquid, known as camphor-oil, to the extent of three to four per cent. This possesses a very strong odor, and holds in solution a quantity of common camphor, which it deposits in crystals when exposed to a low temperature. This oil is much used by the Chinese as an embrocation for all rheumatic complaints, and bids fair to become a very valuable import. In Japan this oil is used for lighting purposes by the very poor, who burn it in open lamps, notwithstanding its odor and dense smoke.

Nearly all the camphor produced in Formosa is shipped from Tamsui, at the northern extremity of the island. This is indeed an interesting place, and the old Spanish fort on the eastern side of the harbor, built more than a thousand years ago, as well as the Consular prison, adds to its charms. Were it not for the trade in camphor the exports would be small indeed. From here, it is conveyed in native vessels to the various ports of China. Owing to its being badly packed and the large quantity of water absorbed during its sublimation, the loss by evaporation during the sea journey is considerable.

This has been somewhat remedied of late years by means of an hydraulic press. But it is becoming more and more evident that the supply from the locality is gradually decreasing. The sea board has no longer its camphor trees, and the collectors are compelled to go further inland for their supply. On the mountains in the interior there are still large tracts, but some care is necessary, so that the supply should not cease altogether.

JAPANESE CAMPHOR.

The Japanese are, however, alive to the importance of this trade, and as the tree is fairly distributed throughout that country, it will doubtless receive the attention of that enterprising nation, especially in the province of Tosa, in Sikok, for it is in this locality that the preparation of camphor is carried on throughout the year, the best results being obtained in the winter. There are at the present time under the care of the Japanese Forestry Department large plantations of young trees, so that it is estimated that the supply of camphor is assured for the next 25 years. The distilling process is simple, but very much in advance of that used in Formosa. The article produced is never quite pure; it generally needs purifying after its arrival in Europe.

This refining was for some time almost exclusively carried on in Venice, but it is now done in Great Britain, Hol-

* *The British and Colonial Druggist.*

land, Hamburg and Paris, the process being a most interesting one. The methods used vary in the several countries. Besides what is known as camphor there are many varieties of the drug, differing somewhat from this article of Eastern commerce, such as Borneo and Malayan camphor, Borneole, Camphyl alcohol or Kapur Barus, Blumea or Ngai camphor, and others more or less known in perfumery and pharmacy, obtained from the leaves, flowers, fruit and roots of various trees and shrubs, such as the bergamot tree, the bitter orange, orris root, thyme, tobacco leaves, and many other sources.

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Examination Questions of the Ontario College of Pharmacy.

JUNIOR EXAMINATIONS.

Pharmacy.

1. Hydrargyri Iodidum Rubrum. Give (a) chemical name and formula; (b) method of preparation in detail, stating reasons in full for each step from beginning to end; (c) equation showing chemical change which takes place; (d) means of determining the quantities of the necessary ingredients to furnish the greatest possible yield of salt.
2. (a) What volume of ether purus will be required to counterpoise four fluid ounces of acidum nitricum? (b) What will 0.5 liter of rectified spirit weigh, and (c) what weight of absolute alcohol will it represent?
3. (a) Differentiate between water of crystallization and water of decrepitation. (b) Explain why granulation is a more efficient means of purifying certain chemical salts than re-crystallization.
4. How many avoirdupois pounds are represented by the sum of 425 dekagrams, 8½ kilos, 3¼ myrigrams, 825 decigrams, 460 milligrams and 18 grams.
5. (a) Describe and illustrate a method of upward filtration, stating its advantages over the usual method, and the objects gained. What medium may be used in the filtration of (b) phosphoric acid, (c) solution of soda?
6. Having in stock 50 grams of powdered opium containing 8 p.c. of morphine, in what proportions can I most economically mix with it powders assaying 9, 12 and 15 p. c., to yield a product that will assay 10 p. c. morphine.
7. (a) Mention the initial unit of the metric system; (b) explain the derivation of the unit of weight from the lineal unit; (c) show the relations existing between the units of capacity and length. Give the equivalents of the following in the customary weights and measures: (c) meter, (d) gram, (e) liter. Give approximate metrical equivalent for: (f) grain, (g) drachm, (h) fluid ounces, (i) inch.
8. (a) Define and give examples of solution by intervention; (b) define supersaturated solution; (c) a solution of potassium chlorate saturated at 15° C., weighs 41¼ ozs.; what amount of salt is there in solution; (d) and what is the percentage strength of the solution?
9. (a) Define specific gravity; (b) what are the units for solids and liquids; (c) state method of using the loaded cylinder in specific gravity determinations. Give sp. gr. and percentage strength of (a) spiritus tenulior, (b) ether, (c) chloroformum, (d) liquor ammoniæ, (e) liquor ammoniæ fortior.
10. A piece of wax weighs 14.25 grams; a block of brass (sufficiently large to immerse the wax in water) weighs in distilled water, 15° C.—30 grams; wax and brass together weigh in distilled water,

15° C.—29.25 grams, what is the specific gravity of the wax.

11. State how each of the following are affected by exposure in uncorked bottles; (a) plumbi acetat, (b) zinci sulphat, (c) calcii chlorid, (d) liquor plumbi subacetat.

12. Give test to distinguish between a solution of plumbic acetate and Goulard's extract.

Pharmaceutical Laboratory.

1. Determine the extractive matter in the liquid preparation handed you, and report according to the following forms: (a) Quantity of liquid taken. (b) Amount (actual) of extractive matter found. (c) Percentage of extractive matter found. (d) Write out process used in determining extractive, in detail, and exhibit all figures used.
 2. Determine the specific gravity of the solid substance and submit a report of your results in accordance with the subjoined form: (a) Substance marked. (b) Weight of substance taken. (c) Weight of an equal volume of water. (d) Specific gravity of substance. Exhibit all figures used in the above determination.
- N. B.—Neatness of work, order in arrangement, and cleanliness of working desk and outfit, will enter as important factors in your ratings.

Practical Chemistry.

1. Detect acid in substance marked "A."
2. Detect metal in substance marked "B."
3. Detect acid in substance marked "C."
4. Detect acid in substance marked "D."
5. Blow a bulb on end of straight glass tube.
6. Write equations illustrating the action of heat upon: (a) Ammonium nitrate. (b) Hydrogen peroxide.
7. What compounds are formed by the action of hot concentrated sulphuric acid upon the following substances: (a) Sulphur. (b) Hydriodic acid. (c) Oxalic acid. (d) Hydrogen.
8. Write equations, showing the action of chlorine on: (a) Hydrogen sulphide. (b) Hot potassium hydrate. (c) Potassium bromide.
9. How would you detect the presence of a bromide in an iodide?

Chemistry and Physics.

1. State the law of definite proportion and illustrate your answer.
2. Give the history, occurrences, preparation and properties of ammonia.
3. How much oxygen can be obtained from 200 grammes of potassium chlorate (a) at normal temperature and pressure, (b) at 15° C. and 740 m.m. pressure?
4. What are the impurities in ordinary commercial hydrochloric and sulphuric acids? What are the sources of these impurities? How would the acids be purified?
5. Give an account of the occurrence, preparation, chemical and physical properties of sulphur dioxide. How much sulphur would it require to unite with the oxygen in 1,000 litres of air at 0° and 760 m.m.?
6. Write equations illustrating action of:

(a) Potassium hydrate on ammonium chloride.

(b) Chlorine on hydrogen sulphide.

(c) Barium chloride on a sulphate.

(d) Sulphur dioxide, oxygen, hydrogen, nitrate and water.

7. State Boyle's law. How would it be proved?

Botany.

1. Describe fully specimens marked A and B. Under what would each be classed, and why?
2. What is meant by phyllotaxy? Name the different kinds of buds found on the branch shown, and what is their arrangement?
3. Describe the various forms of inflorescence. Under which would you class the flower shown, and why? Give as minute description as possible of the parts of the same flower seen without dissection.
4. Trace the formation of the fruit and seed from the flower. Describe the specimen of fruit as to class, loculi, placentation, epicarp, etc., also the seed it contains.
5. Describe parenchymatous tissue.

Latin, etc., Therapeutics and Posology.

1. Decline the nouns:—bromidum, congium, liquor, pilula, and spiritus, naming the cases.
2. Give case and syntax of the italicized words:—Recipe tincturæ asafœtidæ drachmam unam quarta quaque hora.
3. Analyze this classical prescription into its component parts, giving each part its name. Translate directions:

Pulv. Jalapæ..... gr. xx
 Pot. Tart. Ac..... ʒ i
 Syr. Zingib..... ʒ ij
 Aq. Ment. P.p..... ʒ jss
 Ft. haust. stat. sumend.

4. Apply Young's rule to the above prescription to reduce it to suit a child of four years of age.
5. Give maximum doses of the following preparations:—Pulv. creatæ aromat. c. opio; pil. hydrarg.; extr. stamonil; extr. casc. sagr. fl.; extr. bellad. alcohol.; extr. aloes barb.; vin. antimon.; tr. cannab. ind.; tr. capsici; tr. valer. ammon.
6. Enumerate the ordinary methods of administration of drugs and distinguish between terms local effect and systemic effect, giving example of each.
7. Define the following terms: absorption, digestion, ventricular systole, plasma, and metabolism.
8. Describe, very shortly, the blood.
9. Define the following terms, with examples: tonics, anæsthetics, hypnotics, stimulants, narcotics.

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The Origin of Pharmacy.

The historian of the St. Louis Globe Democrat has been occupying himself with the origin and development of pharmacy, and as a result we have an interesting study of the subject.

3300 YEARS B. C.

The identity of the druggist and the medicine man, he remarks are, in the early ages, after as well as before Christ, necessarily almost inseparable. As early as 3300 years B. C., in the reign of Seneferu, we find directions as to the preparation of prescriptions. The giving of these was accompanied by incantations, so that the faith-cure advocates of today may almost claim this great antiquity. That the school of pharmacy was known among the Assyrians is abundantly attested. In the Ebers papyrus, 1600 years B. C., we have prescriptions of famous physicians. There were blisters and powders and ointments and the gen-

eral use of drugs, both mineral and vegetable. The Hebrews early absorbed a curiosity as to the pharmaceutical art, so great that they had a medical school of their own at Sora, as late as 200 A. D. There was also development in pharmacy in China at a very early day, Ching Nong, a contemporary of Menca I., being learned in the art. Hippocrates, 460-370 B. C., is authority for many facts going to show that in the temples of Æsculapius the art of medicine became somewhat systematized. The pharmacists dwelt within the walls, whilst the physician went out among the people. With Hippocrates, however, the physician and the pharmacist became one. His relations are of his predecessors. He carried his drugs with him. In consequence of an epidemic, about 187 B. C., temples were erected to Æsculapius and Hygeia, introducing pharmacy and therapeutics into Rome. About ninety years later, or about 100 B. C., the people of Rome purchased a "shop of surgery" for Æragathus, who had left Greece for Rome. There he practiced both medicine and pharmacy. He had a fancy for operations, and was therefore driven out.

IN THE YEAR 1.

After this the extensive use of drugs showed the tendency toward pharmacy. Monocrates, 1 A. D., was one of the earliest of these disciples. He invented diachylon plaster, which is much the same as that used to-day. So also was Archigenes. He employed opium in dysentery. Another pioneer in pharmacy was Dioscorides, a student in botany and pharmacology, whose work was recognized as an authority as late as the seventeenth century. Dioscorides described 400 different plants. Galen was the first to secure the aroma of plants by distillation. His supremacy was maintained for 1,400 years. It is of record of him that he kept a drug store in Rome. He added half as many to the plants described by Dioscorides. Then came a period of decline. There were, however, three great men—Buffus, who discovered the function of the recurrent laryngeal nerve, and Aurellanus and Leonidas, who proposed isolation in contagious diseases, and who were denounced as brutes for this action. Orbasius, in the fourth century, was very active in pharmacy. Pope Gregory, the great, in the sixth century, proclaimed the school of homeopathy, which, however, had prevailed in China several centuries before.

PHARMACY AMONG THE ARABIANS.

The Arabians did much to extend the practice of pharmacy, together with the separation of medicine and pharmacy, which was recognized as early as the eighth century. The Arabians held the practitioners of medicine in very high esteem. Mahomet himself had a fancy for the healing art, and there is reason for believing that numerous medical works were preserved by the Arabian physicians out of the destruction of the Alexandrian library. There were two great schools among the Arabians. Many drugs were imported from the East, and this gave birth to an army of dealers, physicians who also practiced pharmacy, and who were thus distinguished from the regular apothecaries. They existed in Italy as early as the eleventh century. It is also important to know that the separation of medicine and pharmacy was established by law among the Arabians as early as the eleventh century. The school at Salerno compelled its graduates to swear not to give

or accept percentages on prescriptions. This school was founded in the seventh century, but subsequently fell under the control of the Arabs, after which their ideas as to the separation of medicine and pharmacy prevailed.

PHARMACY UNDER THE SARACENS.

It is beyond doubt that, prior to the twelfth century there were drug stores in Cordova, Toledo and other large towns, and that these establishments were under very severe restrictions. The material for the law passed in 1233, and which remained in force a long time, was drawn from these laws by Emperor Frederick II., of the two Sicilies. Under this law every physician was required to give information against any pharmacist who should sell bad drugs. Pharmacies were divided into two classes: (1) the stationarily, who sold simple medicines and non-magistral preparations according to a tariff determined by competent authority, and (2) the confectionarily, whose business consisted in scrupulously dispensing the prescriptions of the medical men. All such establishments were placed under the surveillance of the College of Medicine. Pharmacy was, to a great extent, under the control of the Arabian physicians during the Middle Ages. The religious orders, the Benedictines particularly, largely devoted themselves to pharmacy, pharmacology and therapeutics. These monks were forbidden to shed blood, so surgery largely fell into the hands of the barbers. With the rise of alchemy medicine, pharmacy, chemistry, toxicology, the grocery business, the confectionery business and barbering became one combined trade. In Spain, under the auspices of the Saracens, pharmacy attained a status it never lost. So, also, in Italy. The development of pharmacy in Germany and England, however, took place somewhat later, so that the beginning of their pharmaceutical history is comparatively recent.

EARLY GERMAN DRUGGISTS.

The history in Germany begins in the thirteenth century. A drug store is found to have existed at Muenster in 1267, and one in Augsburg in 1285, and a third in Hildsheim in 1318. So the growth was very slow. The establishment at Hildsheim was originally the property of the church, but after 1385 was controlled by the city. That the boundary line of pharmacy and medicine was clearly defined at this period is shown by the existence of a parchment ordinance of the city of Nuremburg, 1350. This decree ordains that the druggist shall conscientiously fill all written and verbal orders on him according to his best ability; that he shall use none but pure drugs; that he shall treat rich and poor with equal courtesy; that he shall be modest in his charges, and not demand more than he needs to feed and clothe himself and those dependent upon him, allowing a reasonable advance in the cost of the drug as a compensation for his service.

THE GROCER APOTHECARIES OF FRANCE AND ENGLAND.

In France and England grocers and spicers were early united with apothecaries. In 1345 King Edward of England gave a pension of six pence a day to an apothecary of London who took care of his majesty during his illness in Scotland. The separation of the apothecary and the physician must have been pretty complete about that time, and it is also pretty certain that the populace suspected both of giving and taking per-

centages on prescriptions. This is shown in the "Canterbury Tales," in which Chaucer says of his physician:

Full ready had he apothecaries
To send him drugs and lecturaries,
For each of them made other to winne.
Their friendship was not new to begin.

The pictures of the old apothecaries still in existence are of considerable interest. One of them of a drug store of 1548, is vividly described by Shakespeare, fifty years later, in *Romeo and Juliet*:

I do remember an apothecary -
And hereabout he dwells - which have I noted
In later weeds, with overwhelming brows
Culling of simples, meager were his looks;
Sharp misery had worn him to the bones;
And in his needy shop a tortoise hung,
An alligator stuffed, and other skins
Of ill-shaped fishes; and about his shelves
A beggarly account of empty boxes,
Green earthen pots, bladders and musty seeds,
Remnants of packthread and old cakes of roses
Were thinly scattered to make up a show.

THE OLDEST PICTURE OF A DRUG STORE.

The oldest picture of a drug store is one of 1450. It looks like the warehouse of a creamery, with buckets full of butter piled shelf upon shelf, and might easily be taken for such a place were it not for the presence of the druggist preparing his drugs in a three-legged mortar. Another of 1505 shows the pharmacist, in all his official robes, designating to his assistant, with his sword, the drugs to be used. Another, of 1536, is still more pretentious. It is shown while it is undergoing the very rigid inspection provided by law.

The first trace of a pharmacological corporate body is found in Bruges, in Belgium in 1297. It had a large hall, seals, statues and a chapel. Divine services were held every day, and members sworn in. Its members were of distinguished families. It had the exclusive right to sell medicines, and soon became rich and powerful.

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Origin of the Term Anæsthetic.

Edgar Willet, in a communication to the *British Medical Journal*, records a conversation he had with Oliver Wendell Holmes, when the latter was in England in 1886. The discussion had turned on the subject of anæsthetics, when he said: "Do you know the origin of the term?" On receiving a negative answer he replied, "Then I will tell you. I believe it was I who invented it, and this is how it occurred. Many years ago, when ether and chloroform were only just coming into use, Morton, the dentist at Boston, who was largely responsible for the introduction of ether, came to me and asked me if I could suggest for him a word which could be used for both drugs, and also a word which would describe the effect produced by their inhalation. After trying two or three words, æsthetic occurred to me as meaning sensitive, and in consequence anæsthetic as being insensitive easily followed, with anæsthesia for the condition produced. That," he concluded, "was, I believe, the origin of the term."

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Porous Glass for Windows.

The latest hygienic craze in Paris is the use of porous glass for windows. This is declared to possess all the advantages of the ordinary window-framing, and, while light is as freely admitted as through the medium of common glass, the "porous" further admits air too, the minute holes with which this is intersected being too fine to permit of any draught, while they provide a healthy continuous ventilation through the apartment.

"Stump Oratory in Medicine."

BY C. F. BUCKLEY, M. D.,

San Francisco.

"Let it fall rather, though the fork invade
The region of my heart: be Kent unmannerly,
When Lear is mad. What should'st thou do, old man?
Think'st thou, that duty shall have dread to speak,
When power to flattery bows? Reverse thy doom:
And, in thy best consideration, check
This hideous rashness."

As Professor Thorne thinks proper to select his text from Shakespeare, "To spurn the foreign beggar from him," I too might be permitted to quote the "immortal William" in an opposite vein, and I only wish that this beautiful passage may be drunk deeper by the community at large than the brawling politician ever attempts to drink in anything that is good or wholesome.

The man who dares to face the surface of the whirling stream probably gets drowned, even though the highest sense of duty leads him on, but is it not higher to face the storm bravely rather than sail before the wind with the free full sails of flattery? The true friends of America and American institutions, among whom I count myself a very humble one, cannot but be pained at the modern turn of affairs, cannot but be grieved at the nauseous, wretched clap-trap and venom spewed out every now and then by the third rate political hirelings and journals of this country against "Foreign immigration;" against "Invasion by the hungry hordes of Europe of this fair, broad domain of America;" against "The ignorant monstrosities of the obsolete and effete monarchies of Europe," etc. The spirit of '76 is apostrophized and the Fourth of July orator is patted on the back and his "glory is undying;" so runs the current on, and so powerful is it that a gentleman who occupies a high and honorable position in the profession of medicine is whirled along in this vicious maelstrom without the capacity to resist; without even the power to correct his English; without even the power to acquire a knowledge of the facts on either side—so rapid is the stream. See this magnificent rhapsody, "If the blood that warms in my veins as I write at this moment is a sample of that which should inspire my countrymen, we opine that it will not be long." And such is the writing of a highly educated man who would insist that all foreigners should be "examined in English!" When such a man and "id genus omne" representing the learned professions, indulge in the same stock in trade as the bar-room politician, as the mountebank who erects his platform on the street corner, it is time for those who love and admire American institutions to call "Halt!" "Your narrow and acrimonious vituperation nowise represents the noble spirit of '76, with its glorious memories, breathing love and peace and harmony and hope, to the humble and lowly of all nations. This heritage of earth is not yours because you happened to be born here; aye, you have forfeited your birthright, because you have spurned the undying traditions handed over to their successors by the patriot fathers of the Declaration of Independence."

THE PATRIOTISM OF '76.

Because they were natives, were the dandies and the dudes who dined and wined the British all through that sad winter in Philadelphia, more entitled to American citizenship than Rochambeau, or Lafayette, or the band of Irish patriots who, bare-legged and frost-bitten, stood firm by Washington at Valley Forge? The political charlatan who loves no country, as ignorant of political economy as he is

desirous of playing to the gallery on all occasions, and who persistently refuses to recognize the fact that the young man or woman brought up to the age of maturity without expense to the nation, and fully equipped in health and training arrives in a new country, and yet is not a benefit to that country, is a deplorable spectacle; but when a prominent member of the great profession of medicine "spurns from him as a beggar" the young professional man who seeks those shores equipped with all the training that the more enlightened American physicians anxiously seek, the question arises, is he honest or insane?

But rhetoric aside, let us investigate the statements. One put forward without directly expressing it in so many words, is that national examinations prevail all over Europe, including the British Islands. Such is not the fact. Any man or woman can practice medicine in Great Britain or Ireland, even more freely than they can here—though they may not find it quite as safe to practice certain off-shoots of it,—but no person can put surgeon or M.D. on his or her door plate or recover fees in court unless duly qualified in one of the recognized colleges or universities. The degrees of the universities of Paris, Berlin and Vienna as well as those of the universities of Pennsylvania and New York entitle the holder to practice in the British Islands. The university degrees of Great Britain and Ireland—not the other medical qualifications—have been recognized in France, unless the law has recently changed. Not only this, but it is quite a common thing in the British Isles to import from the Continent eminent men of other nationalities and place them in their professional chairs because of their renown and distinction, and the local gentlemen do not boil over with the blood of '76. According to Professor Thorne benighted Mexico admits graduates of France without examination. And why not? Does any sane man doubt that the facilities for medical education both in the personnel of its professors and the general equipment of the colleges are better in France than they can possibly be in Mexico? On calm reflection, not when the hot blood of '76 disturbs the cerebral circulation, I am sure that Dr. Thorne will admit that where these regulations prevail, they were inaugurated not with a view of "spurning the beggar stranger," as he would have it, but simply to protect the community as far as possible, and also to uphold the dignity of the noble profession of medicine.

STATUS OF AMERICAN EDUCATIONAL INSTITUTIONS.

I desire to make no reflections on the present status of any medical college, for I know nothing of it, but I had the simplicity once to accept a chair at the Toland Medical college some 25 years ago, and I believe Professor Thorne knows something of its status at that time, and I ask him now in all seriousness and honor, would he, if given the protection of the life of any community, entrust that community's welfare to the average graduate of that institution of that time? During my session there, out of a class of about 20, I can conscientiously say that only three were capable of even acquiring a knowledge of medicine in their then state of development. Two of those were Englishmen who had neither the funds nor education required for the pursuit of medical studies at home. Would it not be better for the community under these circumstances to have imported two men of a higher education, which cost them nothing, to whom to entrust their lives, than lean upon those two home-made products? It is also a well-known fact that

members of the bar of the British Islands are admitted to practice in the courts of this State without any examination; papers from the institution from which they have graduated alone being sufficient guarantee, and is it not a shame that the legal profession with its necessarily local application can afford to be more liberal than the medical profession with its universal application?

Now, I would ask Dr. Thorne a few questions to which I trust that the bubbling blood of '76 will not deny a judicious answer.

1st. If you or any dear friend of yours were seriously ill would you, "ceteris paribus," rather entrust his or your own life to a distinguished professor, say from Milpitas, or to one of those "European tramps" whom you have occasion to know has studied and graduated in the prominent schools of Europe?

2d. As a professor of surgery do you prefer to recommend that astounding production of the late lamented H. H. Toland, rather than the works of Langenbeck, Billroth, Verneuil, Holmes or Fergusson.

3d. Will you kindly state how many of those "disreputable foreign graduates" have been tried for the crime of pre-natal murder, euphemistically called "mal-practice" in the past 20 years in this State; and how many of the home products have been equally tarnished?

4th. Are Messrs. Bowers and West native or foreign graduates?

All the readers of this journal know the answers to these questions, and they also know on reflection that this old hobby of Dr. Thorne is only on a par with the tactics of that idle and dissolute class from every part of this country, who, like camp-followers, pursue the industrious pioneers until the latter have created a new commonwealth, and then come in to claim the spoils and drive from the public management of their affairs all those tramp "foreigners." We have a very good illustration of it in this State. Foreigners of all denominations settled here, they risked their lives and fortunes freely to conquer the country and place it forever under the starry banner,—the ægis of American liberty,—but now in recent years arrives the magnificent Colonel from the "Sunny South," the New York pot-politician and the New England peanut vender, not any representative of the proper type of American manhood or American gentlemen, and they all want to drive out the "foreigner." "Examine the candidates in English," says the learned Professor Thorne. What English? Who is to gauge the fitness of the examiner? With that boiling blood of '76 coursing through the brain, may not the candidate's nose seem a little too long; the color of his skin a little too dark or light, or his accent insufficiently nasal?

Let me suggest to this Pickwickian legislator to have it engrafted on our body politic that the foreign "tramp graduate" should only be allowed to practice his calling among the "worthless horde" of his own nationality, who had the temerity to come to these shores full of hope and buoyancy. That the American medical "gentleman" forswear forever attending all these worthless foreign mendicants and limit his time and talents exclusively to the grantees of his own class. I should even go further and make it a penal offense that the medical dude from Texas should attend anybody who did not wear stockings. Revolting bombast!!

Has it got to this that the science of the law with its necessary limits and its local technicalities should be wider in its scope and application than the science of medicine

with its necessarily universal application to the whole human family? In writing this article I feel humiliated to think that in this fair "land of promise" any person or set of persons should seek to imitate the fatuous Chinese by building a wall around their country; humiliated that such insolence and arrogance should be ever seen in the land above all others inspiring hope to the people of the world, and above all I feel degraded to think that this narrow spirit of pernicious intolerance should desecrate that noble temple of science consecrated from its earliest dawn to the love, protection and elevation of humanity.

"I would not enter on my list of friends,
"Though graced with polished manners and fine sense,"
"The man who needlessly puts foot on a worm."
"Whose inadvertent step should crush the snail."

Above all other men the physician should bear aloft for his motto:

"*Homo sum et nil humanum a me alienum puto.*"

:o:

A Retrospect of the Treatment of Diseases by Inoculation.

In a paper read by Mr. Long at a meeting of the London Chemists' Assistants' Association, the author said the premises existence of micro-organisms dated back to the middle of the sixteenth century, when Kucher expressed the belief that diseases were attributable to definite micro-organisms. This, however, was before the introduction of the microscope, as we know it, for the instruments at his command were so crude that he failed to discover any of these minute bodies himself, and it was not until some years later that Leuwenhoek, who may be considered the father of the microscope, was able to prove his theory. Leuwenhoek described the organisms which he had observed in letters to the Royal Society in 1675, and from the woodcuts prepared at the time, as well as his own description, it is easy to recognize vibrios, spirilla, and some other forms of bacterial life. Linnæus placed all micro-organisms in one order, but in 1798 Muller, who had made a careful study of the subject, based a classification upon form, mode of progression, and other biological characters. Needham, after devoting much time and labor to the subject, put forward the "spontaneous development theory." His conclusions were based chiefly upon the fact that infusions which had been sterilized by boiling eventually underwent decomposition, though kept in sealed flasks. This theory was vigorously opposed, and was disposed of by Tyndall, who demonstrated germination by spores, and showed that the errors of Needham and his opponents had been due in great measure to imperfect sterilization.

As soon as Leuwenhoek had proved the existence of micro-organisms, many medical men went so far as to attribute all diseases to their agency. This led to the theory being ridiculed and disputed; and as, of course, no proofs were forthcoming, the idea fell into obscurity, and for a long time the subject of the relations between micro-organisms and disease was quite neglected. In 1837 Boehm and others found bacilli in the dejecta of cholera patients; but Davaine, in 1850, was the first to attribute specific changes in the animal organism to bacterial agency. He found bacilli in the blood of a sheep which had died of splenic fever; and experiments, based upon this discovery, led him to believe that the disease was caused by the micro-organism, whose multiplication in the blood produced changes in that fluid of the nature of fermentation, resulting in the death of the animal. By laborious experiments in silk-worm disease, Pasteur was enabled to confirm this hypothesis; but no casual connection

was proved until 1877, when Koch gave a full description, with the life history, of the anthrax bacillus. He proved conclusively that the disease was caused by the organism by showing that the disease could be induced artificially—by inoculating certain animals susceptible to anthrax with minute quantities of pure cultures of the bacillus. This discovery was followed by a still more important one by Pasteur, who observed that in non-fatal cases of chicken-cholera the disease did not recur, and it occurred to him to obtain a virus which would produce a mild form of the disease. This weakened virus he obtained by repeated cultivations of the bacillus in chicken broth, each succeeding cultivation becoming weaker than the last, until, eventually, one was obtained which had the desired effect, and gave complete protection against inoculation with a virulent culture. This experiment threw some light upon the action of cowpox virus in vaccination, for although in constant and extensive use since its introduction by Dr. Jenner in 1798, its *modus operandi* had always been shrouded in mystery.

Pursuing his investigations, Koch succeeded in isolating the bacillus of tuberculosis, but unfortunately his efforts to combat that formidable disease did not meet with much success. Roux, in 1889, in inoculating for diphtheria, instead of using pure cultures of the bacillus, utilized the toxins which the bacilli produced. These he obtained from the culture by precipitation after the organisms had been filtered out, and thus was able to give immunity by the introduction into the tissues of a chemical substance instead of a living virus.

The latest advance is also due to the same scientist. Much difference of opinion still exists as to the nature and mode of action of antitoxin. Whether it is a product of the bacteria themselves, or is built up in the cells of the immune animal, and whether its action upon the diphtheritic poison is direct or indirect, is still undecided, but up to the present the results following its employment seem to leave little room for doubt as to its efficacy.

:o:

Eczema and Its Treatment.

E. M. Alger, attending physician to DeMilt Dispensary, writes in the American Medico-Surgical Bulletin that constipation is a prominent factor in many cases, and should always be carefully and persistently treated. Cases in which constipation and anæmia are united are benefited by the following, called "Starton's Mixture":

Magnæ. sulph.	3vi
Ferri. sulph.	3i
Ac. sulph. dil.	3ii
Syr. prunl. virg.	3i
Aq.	ad 3iv
M. Sig 3i after meals.	

Other cases in which glandular secretion is insufficient are sometimes helped by small doses of calomel. Arsenic, which is a popular remedy in all skin diseases, is of doubtful value. Certainly, from its power of increasing cutaneous blood supply, it would be very harmful in the acute and sub-acute cases, though in well-selected chronic cases it has been successfully employed.

When speaking of internal treatment, the author says that it must, of course, be self-evident that in eczemas caused indirectly by local irritants or parasites, no internal treatment is of any value. Yet it would be very unscientific and harmful to apply a single external application to all forms, and this is the point I wish to emphasize. An acute eczema requires soothing

applications. A sub-acute form requires remedies which are at once soothing and protective and astringent, while a chronic case requires stimulation. The treatment which would cure a chronic case would make a sub-acute case acute in a very short time, and would postpone the cure of an active case indefinitely. The soothing remedies for acute cases include lime water, starch powder, oxide of zinc, bismuth, stearate of zinc, and lead and opium wash. Under such treatment the swelling may disappear in a few hours, the exudation stop and complete recovery take place. Salol gr. xxx petroleum 1 oz., is especially good in some of these cases for its soothing, antiseptic and antipruritic action. In the sub-acute conditions no application is more generally useful than the well-known Lassar Paste:

Ac. salicylic.	grm. xv
Pulv. amyli.	3ij
Zinci. oxid.	3ii
Petrolat. ad.	3i

This is a paste rather than a salve, and has the advantage of allowing any exudation to pass through and escape. As the sub-acute case tends to become chronic, it is helped often by ichthyol 8 per cent. in petrolatum, or by the Diachylon ointment:

Emp. Plumbi.	3iiss
Petrolat. ad.	3i

The chronic cases require vigorous stimulation, best obtained by using some of the tar preparations. Both the oil of cade and the oil of birch can be employed in the strength of about $\frac{1}{2}$ dr. to the ounce of petrolatum.

In this stage arsenic is sometimes of undoubted value. If the skin is very much thickened, as in eczema of the hands, the tarry preparations might be preceded by a 10 per cent. salicylic ointment until the infiltration is reduced. When the itching is very severe and not lessened by the usual treatment, the following will do good service:

Tr. opii.	℥x
Ol. cadali.	3ss
Zinc. oxid.	grm. xl
Ung. ad.	3i

Some authors advocate the use of resorcin and thymol and menthol and chrysarobin, and they have an undoubted value in the parasitic eczemas, but for ordinary cases the writer states that he has always succeeded best with the older remedies.

Eczema is modified by the various conditions and locations in which it appears, but enough has been said to give an idea of treatment, which may be modified to meet exigencies, and to convince any one that it is a waste of time and stamps to write for a "prescription to cure eczema."

:o:

Bacilli in Street Cars.

Experiments recently made by Dr. Ezra Wilson, bacteriologist of the Brooklyn Health Department, demonstrate the presence of bacilli in the dust and sweepings of the street cars in that city. He has reported a fatal case of tuberculosis in a guinea-pig which had been inoculated with bacilli cultivated from dried sputum found in the cars. Health Commissioner Emory has decided, as a means of disinfecting the stations and cars of that city, that they shall be thoroughly cleansed every three days with a solution of bichloride of mercury. A sub-committee on the prevention of tuberculosis, of the Medical Society of the County of Kings, recently recommended that a city ordinance be passed making it a misdemeanor to expectorate in any public conveyance, but the suggestion was not carried out.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Yolk of Eggs in Pharmacy.—J. L. T. writes: "Will you kindly advise me whether you know of any preparation, or any one ingredient, where the yolk of eggs are used; if so, will you kindly give me the formula."

Yolk of egg has been used in pharmacy as an emulsifying agent for many years; farther back, indeed, than our memory runs. In the U. S. Pharmacopoeia a preparation of it is official under the title "Glyceritum Vitelli," synonym Glyconin. The formula stands thus:

Fresh yolk of egg.....	45 Gm.
Glycerin.....	55 Gm.

To make100 Gm.

Rub the yolk of egg in a mortar with the glycerin gradually added, until they are thoroughly mixed. Then transfer the mixture to a bottle.

It is prescribed in the National Formulary as the emulsifying agent of emulsion of oil of turpentine and of cod liver oil; also of acetic turpentine liniment No. 199. The formula for the latter is as follows:

Oil of turpentine.....	3 fl. ozs.
Fresh egg, albumen and yolk.....	1 fl. oz.
Oil of lemon.....	60 min.
Acetic acid.....	300 min.
Rose water.....	2½ fl. ozs.

Triturate or beat the contents of the fresh egg with the oil of turpentine and the oil of lemon in a mortar until they are thoroughly mixed. Then incorporate the acetic acid and rose water.

Humanized Milk.—F. G. H.—The Sun is in error. Humanized milk as understood in England is something quite different from sterilized milk. The former is an article specially prepared so as to approximate as nearly as possible to natural human milk. There are two methods of preparing it. The first is by Professor Frankland, and consists in removing some of the casein by rennet, adding milk sugar to the whey and then adding the solution to a definite amount of fresh milk. This process, while working well, is wasteful, and pharmacists usually add the required extra amount of fat and sugar in a simpler way. The method commonly employed is to dissolve a given amount of milk sugar in water and supply the necessary amount of fat by the addition of cream, the composition of which is determined by analysis. The formula stands thus:

New milk.....	30 ounces
Cream.....	1½ ounces
Milk sugar.....	1½ ounces
Water.....	18 ounces

The approximate composition of this closely corresponds to that of human milk as under:

	HUMAN MILK.	HUMANIZED MILK.
Casein.....	2.7	2.7
Butter.....	3.5	3.7
Milk sugar.....	5.0	5.0

Payne's Tablets.—C. A. M.—These tablets are prescribed by Dr. S. M. Payne, of

New York, for cases of hypertrophic rhinitis. The formula is as follows:

Ammonium chloride.....	gr. ij
Sodium chloride.....	.....
Boric acid ss.....	gr. iij
Carbolic acid.....	gr. j
Zinc chloride.....	gr. ss
Hydrochloric acid.....	℥ss
Alum.....	gr. ss
Menthol.....	.....
Eucalyptol ss.....	gr. ¼

Make one tablet. Dissolve in two ounces of water and use as a spray.

Detection of Capsicum in Tincture of Ginger.—R. A. L.—The presence of capsicum in liquid preparations of ginger may be detected by acidulating the solution and extracting the capsicum by ether or benzene and precipitating by the addition of platinic chloride. Froehde's test—not "Froeb's"—consists of applying to the suspected mixture a few drops of sulphuric acid containing one centigramme of sodium molybdate in every ten cubic centimeters of acid. The production of a pink color changing to red indicates the presence of capsicine. The method is open to objection however, as the presence of any alkaloid would tend to produce a similar color reaction.

Elixir of Albuminate of Iron.—W. J. M., asks for a formula for a clear elixir of albuminate of iron.

The formula given below is from an English source and is unverified:

Egg albumen.....	30 parts
Cinnamon water.....	970 parts
Solution of dialysed iron.....	90 parts
Caustic soda.....	175 parts
Alcohol.....	150 parts
Distilled water to.....	1,000 parts

Dissolve the albumin in the cinnamon water; dilute the solution of iron with 400 parts of water, and add the alcohol. Mix the solutions, add the soda, set aside for six hours, strain through absorbent cotton and make up weight to 1,000 parts.

Working Formula for Tablets.—W. B. would like a working formula for making the following prescription into compressed tablets, to make a firm tablet:

Cubebs, powd.....	2 grains	} in each tablet.
Salol.....	3 grains	
Pepsin.....	½ grain	
Balsam copaiba.....	2 grains	

To be made into compressed tablets not exceeding 10 grains weight.

Any difficulty in making up this combination would probably come from the balsam copaiba, and this can be obviated by mixing the balsam with 25 per cent. of magnesia and heating until a solid dry mass results, which must then be finely powdered. The powdered cubebs should be in a very fine powder, finer than No. 100, if possible; and should this tablet be made in large quantities it would be well to triturate the powdered cubebs with an equal amount of coarse sugar of milk. The salol and pepsin should also be in a minute state of subdivision; passed through a No. 100 sieve, if possible. The powders, as above prepared, should then be mixed intimately with a sufficient quantity of a mixture of powdered sugar of milk, 70 parts; powdered cane sugar, 25 parts, and powdered acacia, 5 parts, to make the tablets weigh 10 grains each, adding sufficient water to the thoroughly mixed powders to dampen so that when pressed through a sieve of 10 meshes to the linear inch it would form granules which, when dry, can be ground or otherwise reduced to a granulation which will pass through a No. 20 sieve. Should there be any difficulty from this tablet crumbling when made by the above formula, it

could be remedied by reducing the granulation to a No. 30 or 40 before running it on the machine. This combination will require considerable pressure, and the dies and punches should be perfect.

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Students' Column.

Organic Materia Medica of the U. S. P.

[Continued from Page 366.]

Jalapa. Jalap.

BOTANICAL NAME......Ipomoea Jalapa.
NATURAL ORDER......Convolvulaceae.
HABITAT......Damp and shady woods of the Mexican Andes (Eastern slope).
CONSTITUENTS......The most important medicinal constituent, *Resina Jalapa*, from which is obtained convulvulin (glucos).
PROPERTIES......Hydragogue cathartic.
PARTS USED......The tuberous root.

Dose—Ext. Alcoholic. Gm. 0.30—1.00; Pulv. Jalap Gm. 0.60—2.00; Resin gm. 0.8—0.4

Juglans. Juglans; butternut-bark; walnut.

BOTANICAL NAME......Juglans cinerea.
NATURAL ORDER......Juglandaceae.
HABITAT......Canada and the United States
CONSTITUENTS......Tannin, resin, volatile and fixed oils and bitter principle nucine or juglone.
PROPERTIES......Purgative, hepatic stimulant.
PARTS USED......The bark of the root.

Dose—Ext. Gm. 1.30—2.00.

Kamala. Kamala; rottlera; Indian silk dye.

BOTANICAL NAME......Mallotus philippinensis.
NATURAL ORDER......Euphorbiaceae.
HABITAT......Australia, Eastern China, India, Southern Arabia and Abyssinia.
CONSTITUENTS......Resin (80 per cent.), bitter principles rottlerin (C₂₂H₃₀O₆) and Mallotoxin (C₁₉H₁₆O₆)
PROPERTIES......Anthelmintic against *tenia solium*.
PARTS USED......The glands and hairs from the capsules.

Dose—Gm. 4—8.

Kino. Kino.

BOTANICAL NAME......Pterocarpus Marsupium.
NATURAL ORDER......Leguminosae.
HABITAT......India and Ceylon.
CONSTITUENTS......Kino-tannic acid.
PROPERTIES......Astringent like catechu but more lenitive.
PARTS USED......The inspissated juice.

Dose—Tinct. Cc. 4—8.

Krameria. Krameria; rhatany.

BOTANICAL NAME......Krameria triandra and Krameria linaria.
NATURAL ORDER......Polygalaceae.
HABITAT......Bolivia and Peru.
CONSTITUENTS......Ratanine (amido acid) ratanhia tannic acid (18 per cent.).
PROPERTIES......Powerful astringent and tonic.
PARTS USED......The root.

Dose—Ext. Gm. 0.30—1.30; **Ext. Md. Cc.** 2; **Tinct. Cc.** 4—8.

Lactucarium. Lactucarium; lettuce.

BOTANICAL NAME......Lactuca virosa.
NATURAL ORDER......Compositae.
HABITAT......Germany and Great Britain.
CONSTITUENTS......Bitter principle, lactucaria lactucon.
PROPERTIES......Anodyne, narcotic.
PARTS USED......The concrete milk juice.

Lappa. Lappa; burdock.

BOTANICAL NAME......Arctium Lappa.
NATURAL ORDER......Compositae.
HABITAT......Northern Asia, naturalized in North America.
CONSTITUENTS......Inulin, mucilage, sugar.
PROPERTIES......Depurative, alterative.
PARTS USED......The root.

Dose—Ext. Cc. 2—8.

Leptandra. Leptandra; Culver's root; Culver's physic; black root.

BOTANICAL NAME......Veronica virginica.
NATURAL ORDER......Scrophulariaceae.
HABITAT......Canada and the United States.
CONSTITUENTS......Glucose, bitter principle, leptandrin, traces of resin and volatile oil.
PROPERTIES......Cathartic, hepatic stimulant; expectorant.

PARTS USED......The rhizome and roots.

Dose—Ext. Gm. 2—4; **Ext. Md. Cc.** 0.60—1.30.

(To be Continued.)



Written for the
American Druggist and Pharmaceutical Record.

ADVERTISING HONESTY.

By NATHANIEL C. FOWLER.

In my last article, "Correct Catalogues," I touched on honesty in publicity. In this article I refer to nothing else. Business men have tried every method of advertising.

They've lied bald-headedly.

They've lied all the time.

They've lied part of the time.

They've lied a little of the time.

They've lied once in a while.

That is, some business men have.

They have exaggerated.

They have burned red fire around their goods.

They have covered up the deficiencies and double varnished the good points.

Rivalry in business has appeared to force advertisers to say anything and do anything which they think will sell goods and keep the other fellow under them.

AS A BUSINESS POLICY.

This article will not discuss honesty and dishonesty from moral standpoints.

It will treat them from the cold-blooded standpoint of hard business.

Dishonesty in advertising is overdone.

Exaggeration in advertising is as common as the everlasting breezes.

Misstatements are expected, and almost universally indulged in.

Lying advertisements are the order of the day.

Ninety-nine per cent. of people don't believe advertisements, and they have a perfect right not to.

To-day honesty is originality.

Honesty is never overdone.

Honesty can not be overdone.

AN UNWORKED FIELD.

Honesty is the only thing that is left to the advertiser, for everything else is overworked.

One should be honest from policy, irrespective of being honest from principle.

The honest advertiser always does the business.

The honest store always makes more money in the long run.

The dishonest store may make more in the short run.

If the advertiser intends to do business for a week or a month very likely he can make more profit by lying, but if he is in business to stay, to establish a local or national reputation, and purposes to do business year in and year out, and leave his business to posterity, he will find that honesty will pay him.

Extreme honesty, so long as it isn't made ridiculous, will be considered by the public as a manifestation of startling originality, and will be appreciated.

One thing is certain, the public believe all men are liars, particularly all men that advertise.

The public believe that there are few goods as they are represented to be.

Nearly every advertisement is in big type, with bold headings, filled with deliberate lies or with the truth peeled so thin that the microscope cannot reveal the dividing line between cripple truth and direct dishonesty.

There are firms in New York City, and in all large cities, which have become rich through misrepresentation. But ask the cashier of the bank they do business with if he will discount as much of their paper as he will of the straightforward, honest concern, and the answer, if he dares to give an answer, will teach a lesson in honesty which can never be forgotten.

I do not believe in over-conservatism.

I do not believe that conservatism is necessarily a part of honesty.

I believe a man can be just as much of a boomer, just as much of a hustler, and be honest, as he can by practising any other method of business-drawing.

Honesty can be bold. It simply must be handled carefully.

Honesty can be made the leader of the store.

It isn't necessary for a man to advertise that he is honest.

If he does, folks will believe he is lying, but he can so present his goods and so run his store, that people will learn for themselves that his word is as good as law, and that everything he sells is just what it is represented to be.

THE HONEST ADVERTISER ABOVE COMPETITION.

The honest advertiser is practically above competition, because competition cannot reach him.

There is always room for honest advertisers.

The public will find the outs of every article advertised, whether the advertiser calls their attention to them or not, and if the advertiser takes particular pains to cover up the shortcomings of his goods, the public will find these shortcomings, and so magnify them that they will appear to be more serious than they are.

Let me illustrate my argument by taking a very simple example.

I have a horse.

I want to sell it.

I know that the horse cribs.

Otherwise he is all right.

I know it is possible to break him of cribbing.

The horse trots well, is gentle, and so far as I know, a perfect horse outside of cribbing.

I can advertise that the horse is perfect, that there are no outs about it, and the chances are mighty few that people

will call to look at him, because they will believe I am lying.

A horse without an out isn't generally for sale.

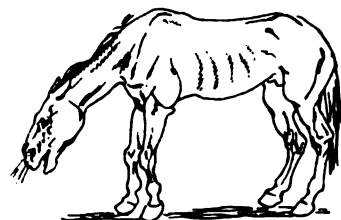
They will imagine that the horse has a good many outs because I say he has none.

If I advertise that the horse is all right except that he cribs, and that because he cribs I am willing to sell him for a certain price, horse buyers who want horses will come to look at the horse,

WHICH?



A HACKING COUGH



OR A COUGHING HACK.

Between the two, one might wish that the hack have a cough rather than that his cough have a hack.

Our famous Hoarhound Cough Drops prevent hacking Coughs.

The Penny Royal Pharmacy.

Front Street, Chicago.

Designed by Robert Spurgin, Chicago.

and they won't believe that cribbing is half as bad as it really is.

They will believe that they can cure the horse of cribbing, and so they can if they take time.

I have presented to them the out of the horse.

DISARM CRITICISM.

I have disarmed their argument, and have told them exactly what they are likely to find out themselves.

I have not injured the sale of the horse. I have simply made it easier to sell the horse.

You will make of him a perpetual advertiser, who will, mean though he may be, give his whole trade to you and make all those under his influence come to you.

It practically costs nothing to be honest.

It may cost a great deal to be dishonest.

You never know what dishonest advertising is going to bring forth.

Honest advertising will never do you any harm.

TELL THE WHOLE TRUTH.

Tell the truth, and not only tell the truth, tell the whole truth. Tell it so the people will believe you, and stand by you.

They will occasionally go to the cheap John store, but the honest advertiser and the honest business man will get the bulk of the trade and hold the bulk of the trade.

Honesty in advertising means permanency in business.

Dishonesty in advertising means transient profit, with great opportunity for, sooner or later, failure.

Never advertise goods at less than cost unless you can prove that you are selling them for less than cost.

Never advertise unparalleled bargains, unless you present with the statement positive evidence that the bargains are what you say they are.

People think that the man who is ad-

How it Might be Done.*

The business manager, returning from lunch, had taken his seat with the feeling of relief natural at finding no visitors waiting to prevent his disposing of the accumulation on his desk. He was just settling down to work when the young lady whose duty it is to announce visitors informed him that a gentleman desired to see him. The visitor declined to give his name, but assured her that his business was important.

"Book agent?" said the manager.

"Think not. Has no package."

"Life insurance?"

"Don't know. Says you will be glad to see him when you know his business."

"Show him in" was said with the weary air of a man ready to bet gold dollars to carpet tacks that the axe to be ground would not turn out to be his.

The stranger was a small and bustling person, perfectly self satisfied and self possessed. He introduced himself as one whose time was valuable, as he knew was also that of the person he was addressing, to which the manager gave a polite nod of assent. He said:

"We will, then, be brief, and come at once to the point. When we make an arrangement, if you desire, I will give you my real name, but I am better known in the profession by my nom de plume of Pen Driver. I say profession, for to excel in it one must possess the qualifications of all professions. We are sometimes called promoters of publicity."

"Advertising agent?"

"By no means. My function is before and after, but particularly above that of the advertising agent. It has, it is true, to do with advertising but on a plane immeasurably beyond the capacity of the best and most accomplished agent. It is mine to give an atmosphere of art and poetry to everything I touch."

"Ah! advertisement writer. The woods are full of them. One count has reached about 297½. One of them turns out to be a boy in an advertising agency. He is the half."

"I see you are not familiar with my work. As you say, that line is overdone and the public taste has become more fastidious, and little familiarities which seemed like slapping the reader on the back and saying: 'Hello, old chapple,' or 'old girl,' as the case might be, don't go so well now. Besides, advertisers don't want to pay for so much white paper as they used to. There is very little money in that sort of thing now."

"I do, however, claim to be the originator of the infantile or nursery style of advertising, and used to take much pride in it. About ten or fifteen years ago it was very effective. Could anything be better than this. I was swinging the advertising of the Dakota Lamp Company—poor goods, less said about them the better. So I gave them—

Mary had a little Lamp,
Its wick was white as snow
And though Miss Mary often went,
The Lamp would never go,

out in the night time. Mary went.
The Lamp did not go. Will you not go
—now—to your desk and write for a
circular, or better, send a dollar for
a Lamp and save trouble.

"I claim circular as entirely original. If I were doing it now, I would also say dollar."

"It is plain," said the manager, "that you have a remarkable talent, but I regret to say in a line for which I see no opening in The Iron Age, which cir-

* The Iron Age.

culates among a class of serious business men not likely to be taken with nursery rhymes or familiarities. They see too many travelers for that."

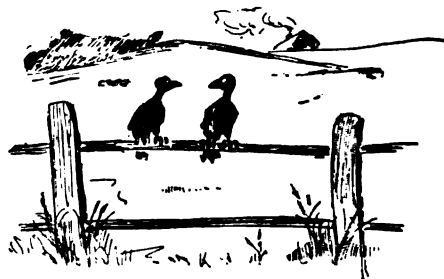
"My dear sir, I am business from start to finish. This year I call myself a trade persuader. Next year I shall be a trade producer—for two reasons: First, in my line all depends on pandering to the public desire for novelty. Second, we have persuaded all the trade now in existence, and to keep up the demand new trade must be produced."

"But this is all preliminary. I have been engaged with one of the large department stores up town with such success that they will probably need but little from me next year, and in looking over the field for a new connection I naturally thought first of The Iron Age. I said, there is a publication which is old and well established, with an enormous circulation, but its advertising pages are filled with announcements that look as if they might have been written by the advertisers themselves and are illustrated by cuts that simply show the articles as they really are."

"But what," said the manager, "can be better than a business advertisement with a business cut in a business paper that goes to business men?"

"To a certain extent and for mere business purposes you are quite right, but every manual of the science of advertising will tell you that the first object to be gained is publicity, and if you confine the interest in your advertisements to grown up men you are ignoring the far greater number of ladies and young persons. What is there to interest them in your advertising pages? Twenty years ago, when The Iron Age was printed on about the largest sheet of paper used by any journal, and good paper, too, the ladies found it just the thing to cut dress patterns from. Don't you see what a publicity that was?"

"Now, I have called to-day to explain to you a plan by which you can secure the attention of the family and office boys while strengthening your hold on your business men. Take for example the article of Crowbars. A picture of a Crowbar could not be made very attractive unless treated ideally, as in this sketch, which in your columns would



make an advertisement bound to secure results. Observe a manufacturer prefers to sell more than one crowbar, and so the second bar is added to the picture. Don't overlook the fact that the advertiser must take at least two or three times the space to insert this cut as would be needed for one of the article itself or for the words in good-sized type."

"Thought they were young turkeys." "No, no. A very good representation of the election crow so many people are eating these days. I venture to say that, as a moderate, conservative estimate, one-half the subscribers to your paper would be urged by their families to confine their purchases to houses that showed not only

Babies

Perfumed with

Sweet Chimes

Are sweeter if not better than other babies. Try it on your own baby. If you haven't one, borrow one. Anyway try Sweet Chimes Perfume.

For Sale Only in Winona at
PITTMAN'S DRUG STORE.

Specimen from Winona, Minn.

vertising goods at less than cost is a liar.

They won't believe that your "unparalleled bargains" are unparalleled, unless you prove it.

Place yourself in the place of the buyer, criticise your own advertising as you criticise the advertising of others, and see if you take any stock in statements of "less than cost," "tremendous sacrifices," and "fire, smoke, and water."

Talk to your wife about it.

Talk to your brother.

Talk to your brother-in-law.

Talk to your relatives.

Talk to yourself.

Find out where you all go when you want to purchase something good for anything.

You go to the store which never lies in its advertisements, and which sells goods you can depend upon.

If you and yours demand honesty in advertising, why shouldn't others demand the same thing of you?

You and your relatives represent the great masses.

Never advertise, and never do yourself what you wouldn't appreciate if done by others.

If every advertiser would enter his own store as a stranger, and criticise his own business methods as he criticises the methods of others, there would be a wonderful change in the management of every business under the light of the business sun.

their ability to make and sell goods, but also their desire to educate and amuse."

"All that is very well in advertising Lamps and gimcracks, but I don't think it would go with the up-to-date Hardwaremen. Now, seriously, do you think an advertiser could be paid to put his name under a thing like that?"

"Certainly he would. I think I am right in saying there is not one of your advertisements devoted to Crowbars. If you will authorize me to solicit for you I guarantee to secure an order from the first maker to whom I show this sketch, and you see it will require a good sized space to hold the cut."

"Now, take another case—Taps and Dies. You advertise them. But how



commonplace is the appearance of a cut that illustrates such simple articles. They should be treated in this way. In this sketch you will discover humor and point, and something that irresistibly commands attention. Notice how I have caught the spirit of the trade. The man who taps is strong and robust and wears in his belt the insignia of his order, while he who dies is weak kneed and evidently one of the class Wall Street calls lambs. This cut shows what an advertisement should be—striking and prompt in its effect."

"I should think that cut would knock 'em out," said the manager, "though our people are tough and might manage to send a few dollarrets for a sample order before death."

"Your success, which is based, I should judge, more on a large circulation and the acknowledged character and influence of your journal than on the modern theories of advertising, has naturally made you conservative and not disposed to welcome innovations."

"That's where you're way off. There's not a man in the city more anxious for new ideas if they are better than the old. If not, I have no use for them."

"Well, let me go into heavier lines. You advertise a great many rolling mills with no cuts at all. This is wrong. You can't, it is true, make a



picture of a rolling mill that would be of any earthly use in an advertisement, but you can do something like this.

What do you think of that, life and movement, eh? I should say so. The rolling mill that uses that cut will sell



rolls every time. And this of Iron Casting. Get on to the Chinaman. I am going to run the Chinaman strong next year. He'll make a success like Palmer Cox's Brownies. Bound to bring great results to any one bright enough to catch on to his pig tail."

"Safe enough, I guess. The Chinese won't be likely to declare war against us next year."

"I can do the same for any article you advertise. Here, see this coffee mill. I could get up something great. For instance, put a sketchy picture of your coffee mill in lower right hand corner of, say, a half-page space; then in the upper left hand corner, in some peculiar arrangement of type, this beautiful quotation, slightly changed:

The mill will never grind again
The coffee that has passed.

Or this, which I consider more to the point:

The coffee that goes often to the mill
will be ground at last.

Then in the smallest type at the bottom say to send to the manufacturers for booklet, leaflet, circular or anything else you like that ends in et. People are bound to write for anything ending in et, and as the cut don't show much they have to write if they want to know anything about it."

"Don't you think you could afford to give more information in the advertisement and save some of this correspondence?" said the manager.

"No, sir! Advertisers want results. What are results? Why, inquiries, and if you give the reader points enough to decide if he wants an article, he won't write unless he means to buy it. Inquiries tickle the advertiser, even if he never makes a sale from them."

"Well, how about the cost of these artistic efforts of yours and how many can you turn out?"

"Oh, they can't be made cheaply. It takes about a day on an average to think up a scheme; then, as no one can make much designs in cold blood, it takes the best part of the evening and the expenditure of some money to get warmed up to the right point, and the drawing is finished about two or three o'clock in the morning. If one gets warmed up a little too much he can't do any work that night and not very much next day. Four or five a week is all that should be expected."

"Well, good day; we'll think it over," said the manager, who called his

stenographer and dictated something like this to about twenty advertisers:

"Dear Sir: I must call your attention again to the fact that the cut in your advertisement on page—is very much worn. You know that our edition is large and the wear on cuts necessarily severe. Please send us a new one. It seems a pity to save a twenty-five cent electrotype and spoil a hundred dollar advertisement."

Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the third issue following their publication. All of our readers are invited to compete for the prizes.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College Place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Questions; Twelfth Series.

CHEMISTRY.

121.—Describe briefly two well-known tests for arsenic, and state two medicinal chemicals which are sometimes contaminated with it?

122.—What tests would suffice to distinguish chemically between zinc sulphate and epsom salts?

123.—How would you distinguish between powdered citric acid and powdered tartaric acid?

124.—How would you distinguish between powdered borax and powdered Rochelle salts?

125.—How would you distinguish between powdered sodium bromide and potassium bromide?

126.—How would you distinguish between solution of chloride of iron and solution of sulphate of iron?

127.—What impurity is most apt to be found in sodium bicarbonate and how would you detect it?

128.—What impurity is to be looked for in gallic acid and how is it detected?

129.—How would you distinguish between hydrobromic and hydrochloric acids?

130.—How would you distinguish between oxalic acid and Epsom salts?

The answers to the ninth series of questions will appear in the issue of January 10th.

NITRO-GLYCERIN FOR SINGULTUS

Griswold (Journal of the American Medical Association, 1894, vol. xiii, No. 17, p. 646) has reported a case of obstinate singultus in an habitual alcoholic fifty years old, which, after the failure of other measures, was controlled by the administration of a pill of nitro-glycerin, gr. $\frac{1}{16}$, given at intervals of three hours. The hiccup ceased after the administration of the fifth pill.



NEW YORK.

John G. Low, of the Low Art Tile Co., has returned to Boston, after a week in New York city.

Percy C. Magnus has been elected an honorary member of the "Pharmaceutical Club of New York."

The old College of Pharmacy, at 209 to 213 East Twenty-third street, was sold for \$62,000 to the Cass Realty Company.

Weller's pharmacy on Congress street, Jersey City Heights, has been removed to Paterson Plank Road, West Hoboken.

A new drug store has been opened at 1693 and 1695 Amsterdam avenue by Dall & Uhle. Low has the contract for both cold and hot fountains.

H. J. Fleischhauer will soon open a new store at 284 East Front street, Plainfield, N. J. One of the features will be a Low's Art Tile Fountain.

G. D. Johnson, Eighth avenue and One Hundred and Twentieth street, has improved his store. Among the additions is a very handsome Low's Art Tile Fountain.

Charles Schleunig's pharmacy at the corner of Bleecker street and Summit avenue, Jersey City Heights, has been sold since his death to S. Weber, who was formerly with H. T. Bernhard of West Hoboken.

Long Island druggists find soda water business warrants increased facilities. The following will soon have Low's Fountains: J. V. Lowry, Sag Harbor; Richard W. Jones, Amityville; A. G. Howell, Southampton.

The store recently opened by Webb & Stevens, Eighty-seventh street and Lexington avenue, is one of the handsomest in the city. All the modern improvements, including a special fountain by Low Art Tile Co.

John H. Sheehan, wife and daughter returned to their home in Utica the 29th ult., after several months' sojourn abroad. Mr. Sheehan is the senior member of the firm of John H. Sheehan & Co., wholesale and retail druggists, 167 Genesee street, Utica.

O. R. Gurnee, No. 111 Bedford, corner Gates avenue, Brooklyn, is opening a very handsome store at the corner of Bedford avenue and Halsey street. Fox, Fultz & Webster supply the glassware, scales and sundries. He is very sure to meet with success in his new venture.

Hugo Simon will open a first-class drug store at 77th street and Amsterdam avenue. He will, no doubt, obtain his share of the business, although, in this neighborhood, "There are others." He purchased of Fox, Fultz & Webster his entire outfit of shelf bottles, scales and sundries.

The members of the newly organized pharmaceutical club sat down to their first club dinner on the evening of Wednesday, November 21, in their rooms at 37 East Nineteenth street. No papers were read nor speeches made. The club was incorporated in August and has now a good membership.

Papers on pharmaceutical subjects are promised for Thursday evenings. The officers are as follows: President, Robert J. Bell; vice-president, John W. Bachelder; treasurer, Frank A. Barnes, and secretary, Velle A. Wood.

Geo. A. Fuller, formerly of Hall & Ruckle, is now with C. G. Bacon & Co., who have succeeded to the jobbing drug business of the former firm. Mr. Fuller is one of the best known men in the trade, having been connected with Hall & Ruckle as manager of the sundries department for upwards of twenty years.

One of the most attractive little novelties for Christmas is a patent silver chain which has just been introduced; it is for the purpose of attaching to women's pocket-books in order to prevent them from being stolen, lost or mislaid upon a shopping counter. The chain is attached to the back of a pocketbook in a secure way and the other end of the chain has a safety pin attached.

The popularity of "hot soda" seems to grow rapidly. Among those that have recently added Low's apparatus are: G. S. Tomlinson, 856 Amsterdam avenue; F. T. Dall & Co., 376 Columbus avenue; R. Lucke, 437 Amsterdam avenue; G. R. Klutow, 1754 Lexington avenue; Poland Spring Depot, 8 Park Place, New York city; Emil Volkroth, 79 Newark avenue, Jersey City, N. J.

At the last examination of the New York City Board of Pharmacy the following applicants passed a satisfactory examination and were registered as licentiates: Joseph Sur, Julius Hammer, Wm. Hall, Ernst A. Christiansen, Jesse T. Bailey, Fred. W. Stechmann. During the month 47 pharmacists were registered. Seven pharmacists were convicted and fined for violations of the pharmacy laws.

R. C. Werner, president of the Brooklyn branch of the Interstate League, who does a thriving retail drug business in the Twenty-sixth Ward of Brooklyn, has formed a partnership with Frederick A. Kattman, of 53 Bushwick avenue, and opened a branch pharmacy at Eastern Parkway and Montauk avenue. The store is handsomely equipped, and has already attracted numerous customers in a somewhat sparsely settled neighborhood.

In a recent issue it was stated that Kent's drug stores in Paterson, N. J., had changed hands. This information we find to be er-

roneous as there has been no change at all of proprietorship, Benjamin Kent still owning and conducting the stores at 159 and at 236 Main street, as he has for years past. These stores are two of the oldest in that section, the one at number 159 having been established in 1846 by Robert Gledhill and that at number 236 having been founded by Dr. R. Kent in 1853.

F. T. Dall & Co. have just opened a new drug store at 144th street and Amsterdam avenue, this city. This is a branch of their 78th street and Columbus avenue store. Mr. Dall is very popular, not only with his customers, but also with the drummers who call upon him. To the latter fact, no doubt, is due to a great measure, the success of the firm. They purchased their outfit of shelf bottles, scales, glassware and sundries of Fox, Fultz & Webster.

The Martin building, Nos. 113-115 Genesee street, Utica, burned the 3d inst., destroying Crouse & Comstocks (wholesale druggists and grocers) main offices, salesroom, laboratory and patent medicine department. The building was gutted. The loss is fully covered by insurance. Comstock Bros., the former proprietors, were burned out ten years ago the 2d of last March. Crouse & Comstock are transacting business at their warehouse, which is located in the rear of the office, opposite Root street.

Games of the Wholesale Drug Trade Association Bowling Tournament, rolled December 15, resulted as follows: First game—R. W. Robinson & Son, 682; C. G. Bacon & Co., 499. Second game—Park, Davis & Co., 755; Bruen, Ritchey & Co., 729. Third game—Merck & Co., 746; C. G. Bacon & Co., 636. Fourth game—Whitall, Tatum & Co., 689; Bruen, Ritchey & Co., 648. Fifth game—Merck & Co., 781; R. W. Robinson & Son, 688. Sixth game—Whitall, Tatum & Co., 676; Parke, Davis & Co., 640.

Frederick W. Reeves, well known to New England druggists as the secretary of the Apothecaries' Guild of Boston and Vicinity, spent a day in New York on his return from a trip to Philadelphia and Baltimore in the interests of the projected Pharmacy Fair of Boston. He expressed himself as well pleased with the reception accorded him in both cities. Several of the prominent manufacturing houses in Philadelphia and Baltimore have agreed to exhibit at the Fair. During his stay in Baltimore he did some work for the Interstate Druggists' League that he believes will result in the formation of a local branch there.

Alfred B. Scott, of Messrs. Scott & Bowne, manufacturers of Scott's Emulsion of Cod Liver Oil, is soon to go abroad. He will take up his residence in London, where he will look after the business of foreign countries controlled by the firm. The reason assigned for this move is the necessity of one of the partners locating on the other side. Mr. Bowne, when interviewed a few days ago, said: "This new arrangement is largely the result of our growing European interests. My partner, Mr. Scott, has practically managed the foreign house for several years, and those interests have grown so rapidly that it is essential, for the success of the business, that one of us should give his personal attention to the management of the London house. Of course, it largely devolved upon Mr. Scott to take the management of that end of the business. There will be no radical change in the management of our business, except that Mr. Scott will look after the other side and I will attend to North and South America."

PENNSYLVANIA.

Philadelphia, December 20th.—The Pharmaceutical Association of the Philadelphia College of Pharmacy held the third of its winter monthly meetings in the museum of the college December 18.

The meeting was opened by Thomas S. Weigand, actuary of the college, who introduced Joseph W. England, nominating him as chairman of the meeting. Mr. England assumed charge of the meeting, and first presented Professor Joseph P. Remington, who in a few remarks presented the college with a fine portrait in pastel of Henry Troth, the founder. The portrait is the gift of Mrs. Henrietta M. Townsend, Mr. Troth's daughter, and was copied from a miniature done when he was 27—his age when he founded the college. Professor Remington made Henry Troth the subject of his discourse and gave a brief and interesting history of his life and connection with the college.

"Henry Troth," he said, "was born in Talbot County, Maryland, September 4, 1794. He came to Philadelphia in 1812 and was apprenticed to Jeremiah Morris, a druggist on the south side of Market street below Eighth. In April, 1815, he went into the wholesale business on Market street below Seventh, where in 1835, he built the first five-story building on Market street. In 1832 the University of Pennsylvania conceived the idea of teaching pharmacy and conferred the degree of Master of Pharmacy upon sixteen apothecaries already in business. This move aroused the independent spirit of Henry Troth, and with his friend, Peter Lehman, he called upon the druggists of Philadelphia to defend the right to educate their own assistants. A meeting was held in Carpenter's Hall, February 23, 1821, the result of which was the establishment of the Philadelphia College of Pharmacy.

"Mr. Troth was a member of the orthodox branch of the Society of Friends, was President of Common Council of Philadelphia for four years and was connected with many public and charitable institutions." Professor Remington closed his talk by quoting the tribute paid to Troth by a contemporary, a professor of the college, shortly after his death, May 22, 1842: "I praise him because he is no longer with us and bring his deeds before our minds, because it is a melancholy enjoyment to dwell upon his memory, more especially in connection with the present ceremonies in which he so often stood conspicuous."

In the absence of Charles H. La Wale, Professor Trimble read his paper on "Hydrobromic Acid."

Wm. B. Burke's paper giving a graphic account of the sponge fields in the Florida reefs and preparing them for the market was then presented. This paper, which was received with marked favor, is given in full on another page of this issue having been further elaborated by the author.

Lyman F. Kebler gave some of his experience with honey, oil of sassafras and ipecac.

DEATH OF CHARLES B. HUNTERSON.

At a meeting of committee, appointed by the physicians and druggists of Philadelphia, the following resolutions were unanimously adopted:

WHEREAS, The Silent Messenger has summoned from our midst Chas. B. Hunterson, Ph.G., for many years a faithful member of our organization,

We his late associates, desire to place on record our

appreciation of his worth and our sorrow for the loss of one who, as a friend, as a man, and as a companion, merited the esteem and regard of all who knew him.

Faithful in his friendship, faithful to his duty, faithful in his home relations, his loss will be long felt in each sphere of life in which Providence placed him.

We extend our heartfelt sympathy to his bereaved wife in this hour of her sore trial, and trust that she may be strengthened and comforted by Him who has promised to be a husband to the widow and a father to the fatherless.

Resolved, That a copy of the above be sent to his family, and printed in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

DR. CHAS. E. BRICKER, President.
JOHN B. REYNOLDS, Secretary.

CHAS. J. JONES, M.D.
WM. F. STEINMETZ, Ph.G.
JOHN DUFFY,
JOHN B. REYNOLDS, Ph.G. } Committee.

THE TRADE IN REVIEW.

H. A. Laersle is gaining a strong foothold in his new store at Thirty-first and Berks streets.

E. H. Lauer, J. M. McCanna, and Harry Skinner, reporters of the Senior Class of the P. C. of Ph., are hustlers.

Professor Sadtler of the Philadelphia College of Pharmacy, lectured in Brooklyn on December 18, his subject being "Asphalt."

The drug store at 1000 South Second street was established in 1828, by John A. Cantrell, and ever since it has remained in the family.

One of the finest prescription drug stores in the bon-ton section of the city, is that conducted by William A. Milliken, at the northeast corner of Twenty-third and Spruce streets.

Robert McFadden, formerly with Louis Seigrist, has purchased F. P. Rutherford's pharmacy at Thirty-second street and Powelton avenue. Mr. Rutherford is studying dentistry.

During the week intervening between Christmas and New Year's, there will be no lecture at the Philadelphia College of Pharmacy. The only department that will be open will be the chemical laboratory.

The fiftieth anniversary of the discovery of Anesthesia by Horace Wells, was fittingly celebrated on December 11, by dentists from all over the United States at Association Hall, the celebration closing with a banquet in the evening at the Union League.

William B. Pettingill, who was arrested on December 4, by the United States Customs officers for selling phenacetine which is said to have been smuggled into this country was given a hearing on December 11, and held in \$1500 bail for his appearance at court.

F. W. Reeves, a prominent pharmacist of Boston, was in this city recently on behalf of the American Pharmacy Fair, which is to be held in Boston next year. He was successful in his undertaking, and while here he put in a good word for the organizing of a branch of the Inter state League of Retail Druggists.

On December 20 and 21, Professor Remington and his assistant, Professor Ryan, of the Philadelphia College of Pharmacy, took the pharmacy class on its annual trip to Brooklyn and New York. While there they visited Dr. Squibb's laboratory, Seabury & Johnson's laboratory, and Parke, Davis & Co's. wholesale establishment.

French, Cave & Co's business for this year has been away ahead of that in

1893. Some months they were forced to work night and day and even then they could not fill all their orders. While this firm has large and commodious quarters, they seem to be inadequate for the constant increase of business.

The Committee on Legislation of the Philadelphia Drug Exchange has issued a circular to the trade in general which is giving in our editorial columns. The circular is signed by E. M. Hance as chairman.

On October 12, the Proprietary Committee of the N. W. D. A., issued a circular to the rebate proprietors and members of the N. W. D. A. calling their attention to the list of parties entitled to purchase rebate goods on quantity discount.

The Gillams' Sons Co., printers, embossers and lithographers, have moved their plant from North Fourth street to Nos. 139, 141 and 143 North Seventh street. Their business has outgrown their old quarters, and now with double the facilities and every improvement in machinery can assure the trade speedy fulfillment of all orders.

George W. Ewing, who succeeded James L. Blispham at 710 South Second street, has one of the best equipped drug stores in that section of the city, and he is capable of handling a large wholesale as well as a retail business. Mr. Ewing is the manufacturer of a catarrh cure which has established for him a name. Besides keeping the necessary stock of drugs he has always on hand paints, oils, ship and family medicine chests etc., also a complete line of novelties.

The Warren Pharmacy, at Warren, Pa., formerly owned and conducted by F. B. Brown & Co., has passed into the hands of F. E. Falconer & Co. The dispensing department is in charge of E. K. Dixon, a competent pharmacist. The Warren Pharmacy is a model establishment and is generally regarded as the most up-to-date pharmacy in Warren. F. E. Falconer and Frank Barnhart, who compose the firm, have always resided in Warren and are held in high esteem by the people.

On December 17, James O'Rourke, 90 years old, was run into by a bicycle at Twenty-fourth and Master streets, and on December 19, he died from the injuries received at that time. The bicyclist was Frederick Steinmetz, the well known druggist of 2838 Girard avenue. Mr. Steinmetz is an enthusiastic member of the Medicus Bicycle Club, and it is claimed the running down of O'Rourke was purely an accident. He is greatly affected by it; and those who saw the man struck exonerate Steinmetz from all blame.

"Not 'horse in your throat,' but 'horse in your drug store,'" said Druggist Siegfried, of Warren, Pa., to a Druggist and Record man recently. He was alluding to his recent adventure with a high stepper. The animal pranced through a plate glass window 66x124. The window was trimmed with a holiday assortment of perfumes, which was damaged to the extent of \$125. The horse jumped over a table, and walking in the direction of the prescription desk proceeded to investigate the mysteries of that department, first, however, demolishing an expensive show case in passing. The owner of the animal was bent on doing the "square thing" and promptly made the damage good. The store is now the talk of the town and Druggist Siegfried estimates the advertising value of the incident at quite \$200.

MASSACHUSETTS.

Boston, December 20.—The City Board of Health is already at work upon an anti-toxin plant. It will be located at Galloupe's Island, where the stalls are nearly completed for the reception of the horses from which the lymph will be secured. The trial supply is to be produced under the personal charge of Dr. Harold C. Ernst, of the Harvard medical school, and all the resources of the school laboratory are to be placed at his disposal for the work. Dr. Ernst in an interview says: "It will be a matter of some months before the work can be started by the board. In fact, I should not promise any definite results inside of six months. The first cost of the plant will be the expensive part of the trial, but once established it will be possible to supply the lymph at a moderate price." A member of the board, however, has stated that a supply of serum is expected at an earlier date than that set by Dr. Ernst, and that the board anticipated no difficulty in securing the necessary funds from the city.

Meanwhile an occasional small supply of the lymph is being received here through New York parties, but it no sooner arrives than it is sent out to physicians for use. Last Saturday a small shipment arrived, which had been expected for a week prior; it was taken up so rapidly that within a half-hour there was none in stock.

MR. WELLS RETURNS.

Rollin Wells, the Somerville druggist, whose disappearance on the day of the Harvard-Yale football game was noted in the last issue, has returned. Mr. Wells is much displeased at the sensational talk which his absence caused. He has made no explanation of his whereabouts other than that he had accepted an invitation to visit friends in New York. It is said, however, that he attended the football game in Springfield, and from there went to New York, where he spent several days. It is due Mr. Wells to state that during his absence his books and papers were examined and found to be in excellent shape.

PITTSFIELD LICENSES.

In Pittsfield last spring the aldermen granted only two druggists' licenses, refusing the applications of the other drug stores in the city. On the night of December 10, however, the license question was again before the board and by a vote of 4 to 3 it was voted to grant licenses to all druggists making proper application. This step was caused by the recent city election, when a heavy license vote was thrown, and meets the approval of the citizens generally, as the sentiment was against concentration of the traffic.

THE PAINT AND OIL CLUB.

The Paint and Oil Club of New England met at the Parker House on the evening of Dec. 12. President A. W. Strauss occupied the chair and there were about 60 members present. As guests the club had: Mr. J. Lewis Pierce, president of the Providence Board of Trade; Prof. James F. Babcock, president of the Boston Druggists' Association; Mr. Alexander S. Porter, president of the Boston Real Estate Exchange; Hon. Jonathan A. Lane, president of the Boston Merchants' Association; Rev. S. H. Roblin; Mr. Charles E. Adams, president of the Massachusetts State Board of Trade, and Mr. J. Russell Marble, president of the Drysalers' Club of New England. W. S. Cutler was elected to serve on the pricing committee during the ensuing month, and several communications from the national committee were referred to the executive committee, as was the mo-

tion to open the February meeting to the lady friends of the members of the club. The subject for discussion was: "The Business Outlook and What Influence Directly or Indirectly, Can Trade Organizations Exert Upon It?" The speakers were President Strauss, Hon. Jonathan A. Lane, Prof. James F. Babcock, Mr. Pierce of the Providence Board of Trade, Mr. Porter, president of the Real Estate Exchange and Rev. S. H. Roblin. Mr. Roland Reed, the actor, was also present and kept the company in good humor with his inimitable stories.

LICENSE TROUBLES IN NATICK.

The town of Natick voted \$1,000 last year to enforce the liquor law, and the officials have paid particular attention to violations by druggists and at times have not been over particular how the evidence was secured.

Recently a number of cases were brought against druggists upon spotter testimony. The first case tried was that against James M. Daniher. The principal witness testified to buying whisky at Daniher's on Nov. 10, and that he swore out the complaint because one of the selectmen, who had given him work, requested him to do it. For the defence, evidence was submitted that this witness was a slave to morphine and that he had purchased morphine pills at Hoey's pharmacy on several occasions, at one time buying 100 half-grain pills. Five local physicians then testified that a morphine eater was unreliable. The judge failed to see how this testimony affected the statement of the first witness and fined the defendant \$80; appealed. The second case tried was that of Daniels and Twitchell. The witness and the date of purchase was the same as in the preceding case. A similar defence was set up, Frederick G. Wheaton, a druggist of 27 years' experience testifying to the injurious effects resulting from the continued use of morphine upon the system and the unreliability of statements made by users of this drug. The judge failed to see how this affected the testimony of the principal government witness and found the defendants guilty; fined \$80; appealed. Three cases remained to be tried, Charles H. Hoey, M. C. Brigham, and Burke and Dolan are the defendants. Hoey's case has been twice continued, the government witness, one Hudson, failing to materialize at either time.

NEWS NOTES.

Leon Hapgood succeeds G. M. Tewksbury at Foxboro.

It is said that a new drug store will soon be opened at Peabody.

Church & Co., Court and Howard streets, intend to enlarge their store.

Elijah Bunker, New Bedford, has purchased a new Tufts' fountain.

John McGeachey, a former base ball player is now a clerk in a Clinton drug store.

Isaac W. Parker, Malden, is a petitioner in insolvency, with debts amounting to \$3,275, and small assets.

W. H. Dunlap & Co., Concord, N. H., are to open a new store. Bangs' mahogany fixtures will be a feature.

Francis Patol is about to open a new store at Holyoke, and has ordered mahogany fixtures from C. H. Bangs.

The insolvency proceedings against George T. Sears, 186 Hanover street, have been continued to April 12.

A. B. Norcross, Wallingford, Conn., is to have a set of mahogany fixtures which he has ordered from C. H. Bangs.

The medical board of this state, which is not yet a year old, has already issued 2,595 certificates. The report of the board will be presented about January.

A building is being erected at Old Town, Me., in which, when completed, H. M. Burnham will open a new store.

Fred G. Durgin, Biddeford, Me., of the firm of Durgin Bros., dealers in paints and oils, died Dec. 12, of typhoid fever. His age was 29 years. He leaves a widow.

James W. Tufts has recently shipped a hot fountain to Frank G. Dort, Keene, N. H., and cold fountains to S. A. Pierce, Quincy, and John P. Delaney, Woburn, that sent to the latter being of the onyx pattern.

Joseph Burnett & Co. have left their old quarters at 27 Central street and have taken a large seven story building at 86 India street. A feature of the new establishment is a large laboratory which is under the supervision of Prof. Markoe.

C. H. Bangs has closed a contract with Matthews Bros., Scranton, Pa., who are soon to occupy a new store, for a set of mahogany fixtures. Mr. Bangs has also received an extensive order from the Webb C. Ball Co. of Cleveland, Ohio (prominent jewelers) for showcases and tables.

J. W. F. Wilson, Jr., of 479 Broadway, was the defendant in a recent suit where the damages were set at \$5,000. Negligence on the part of the defendant's clerk in the sale of salts of tartar for Rochelle salts was alleged. The jury evidently believed the plaintiff's story as the verdict was for \$175.

Fire broke out in the laboratory of Blanding & Blanding's wholesale drug store at Providence, R. I., on the morning of the 14th. A patent sprinkler effectually put out the flames, but the water soaked through to the next floor, where a stock of imported soaps, toilet preparations, perfumes and chamois skins, valued at \$40,000, was badly soaked. The loss will be \$10,000; insured.

Since my last letter the Low Art Tile Co. has sold hot fountains to Thomas & Hussey, Beachmont; two to C. H. and H. A. Lawton, for their two New Bedford stores; T. G. Evans, Providence, R. I.; Curran Bros., Holyoke; F. E. Fickett, Portland, and A. O. Bradford, J. T. Jones and M. A. Lee & Co., Boston. Cold fountains have been sent to I. G. Evans, Providence, R. I., and M. Wright and Dalrymple & Warner, Albany, N. Y.

The Massachusetts Board of Pharmacy completed another three days session on the 18th ult. Only the following 10 of the 89 candidates examined were successful: John T. Kelly of Boston, Henry R. Dennett of Newton, Clarence E. Worthen of Malden, Raymond G. Lewis of Boston, Boyd Rymby of Gloucester, James F. Hyland of Taunton, John A. Gunning of Fall River, Charles O. Chartier of Salem, Arthur W. Mussels of Waltham, Fred W. Bangs of St. Johnsbury, Vt.

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CONNECTICUT.

NEW HAVEN, December 20th.—In the first part of December, Joseph Rosenberg, formerly clerk at E. C. Newport & Son's, the druggists of Meriden, resigned his position with the above firm. As a result of the vacancy caused by Mr. Rosenberg's resignation there has been a change made in the personnel of the staff by the entrance of Fred W. Smith, who was for many years connected with J. H. Parker.

A BIG SENSATION.

A big sensation was caused in New Britain a short time ago, by the arrest of Frederick Hopkins, a member of the drug firm of Cotter & Co., on the charge of perjury and bribing a juror. It seems that in September, Mr. Hopkins was tried for violating the liquor law (at that time New Britain was a prohibition town, it isn't now!) He was arrested for selling a pint of whiskey to a young man named Pierce on June 1, of this year. He pleaded not guilty, and the jury stood eleven for conviction and one for acquittal. During the first trial Mr. Hopkins' friend, Tyler appeared as a witness and swore that he was in the store when Pierce asked for the liquor, and that he heard Hopkins refuse to sell the boy anything in that line. James T. Messenger, a messenger in the United States Court, who was also Hopkins' friend, was the man on the jury who stood out for acquittal. After Judge Hamersley discharged the jury, State Attorney Eggleston decided to take up the case again at the December term of the court, and Hopkins' case was again called for on Tuesday of last week. Not having any friends on the jury Hopkins decided to plead guilty and accordingly he was fined \$100 and costs, which he paid. It was reported that after the trial in September, Hopkins had been telling people in New Britain that it cost him \$25 to buy the jury, and this fact together with the conviction at the December term undoubtedly led State's Attorney Eggleston to believe that some crooked work had been done in the September trial. After fully investigating the evidence he caused Judge Torrance to issue bench warrants for the arrest of the three men implicated, namely, Frederick Hopkins on charges given above, James T. Messenger with accepting a bribe from Hopkins while he was a member of the jury, and George F. Tyler, charged with perjury. The men were put to plead last Thursday in the Superior Court, but they all pleaded not guilty. Their cases have been continued to the next term of the Superior Court. Hopkins' bond is \$2,500, Tyler's and Messenger's \$1,500.

THE COMMISSIONER'S OF PHARMACY.

Nine applicants for druggist's licenses were examined by the commissioners of pharmacy, at the Capitol in Hartford, on Tuesday, December 4. Only two of the nine succeeded in passing the examination. They were Harry Good of New Haven, and C. M. Thompson of Ansonia. The next session of the board will be held on the third Tuesday of January, in the same place. It will be a special session, and the board has already received as many applications, and placed them on file, as it can attend to on that date. The board has adopted the rule of not attempting to examine more than eight or ten applicants at a time.

GAY DETECTIVES.

It has been reported in New Britain that the detectives employed by the Law and Order League have not spent the entire time in that city for the sole purpose of convicting Fred Hopkins, but have been busy among other druggists as well. They are Pinkerton detectives, and receive \$50 for their services. They have had apparently money to burn while in New Britain, as they have been setting the boys up to game suppers, champagne and canvass back duck, and are said to have lost considerable money and taken their losses in a jovial

fashion. Now they are waiting in Hartford to give evidence against their quondam friends.

ANTITOXIN IN HARTFORD.

Drs. M. A. Bailey and E. K. Root the medical inspectors of the Board of Health of Hartford, injected a small quantity of antitoxin, the new diphtheria cure, into the body of the 21 month's old baby of John Cronin of Potter street, Hartford. At the time of giving the antitoxin the child's respiration was very bad, the diphtheritic membrane had formed in the throat, and temperature was 102. The next morning the temperature had fallen to 100, and the child's respiration was noticeably better. The Hartford Board of Health recently received a quantity of serum to use among the poor.

NEWS NOTES.

Druggist Tyler, of Middletown, has had the kinetoscope on exhibition in his store.

Edward O'Donnell, clerk at the Lyceum pharmacy of New Britain, has been ill, but he is all right now.

Health Officer Wright's report shows 42 cases of typhoid fever for the city of New Haven for November.

M. J. Halloran's drug store at New Britain has been entirely renovated and put in good order for the holidays.

Joseph H. Lutz, formerly of the City Pharmacy, Bridgeport, is now located with druggist H. R. Hale, of Norwalk.

Dr. Henry T. Klenke and Miss Anna E. Stahl, both of New Haven, were married in the City of Elms, Thursday, December 20.

The hustle for Dr. Bishop's place on the staff of city physicians in Bridgeport, still continues merrily. There are several who are confident of success.

The county commissioners at their meeting in Willimantic, a couple of weeks ago, granted druggist's licenses to John T. Baker of Willimantic, and John L. Burt of Putnam.

Alderman John W. Lowe, the well-known druggist of the second ward in New Haven, has been seriously ill at his home, a victim, some of his friends believe, to some intestinal trouble from eating tainted oysters.

Drug clerk McGinty, of Danbury, has decided that the barber business is more lucrative than the drug trade, and has consequently taken up the study of tonsorial art in the New England Hotel barber shop of Danbury.

A paper on "Meningeal Diseases in Early Life" by Dr. S. J. Maher, of New Haven, one of the three read before the New Haven County Medical Society at their banquet, in Waterbury, a couple of months ago, has been printed by the New York "Medical Journal."

Two town physicians will be chosen by the selectmen of Hartford, about the first of the year. The town requires that they must be selected from a list furnished by the Hartford Medical Society. The list has been submitted as follows: Drs. M. A. Bailey, B. S. Barrows, George N. Bell, John Howard, J. H. Cahill and H. W. Murlless.

There has been a change at C. A. Pelton's pharmacy, of Middletown. Herbert Laroux, the faithful clerk, who has been for four years located at this store, has resigned his position to better himself. On Jan. 1, he will begin his engagement with N. W. Wheeler & Co., at the Win-

chester Park pharmacy in Springfield, Mass. Mr. Laroux has made a host of friends in Middletown, who were sorry to see him leave.

Thomas H. Powell has accepted the position of prescription clerk at Wheeler's pharmacy in Litchfield. He comes highly recommended, being a graduate of the Ontario College of Pharmacy. He also holds the degree of Bachelor of Pharmacy from Toronto University, and was awarded a special diploma for analytical chemistry. Mr. Harry P. Bissell, whose place Mr. Powell takes, has gone to New York.

Druggist George Smith of Seymour, who is agent for the Derby Home Trust Company in selling their nickel saving stamps, has since August 14, taken in over \$140, and deposited it with the bankers for Seymour savers. This form of saving money is becoming popular with Seymouriens, and as a result the number of depositors are increasing and each accumulating a sum of money which otherwise they would probably have spent.

A farewell supper was tendered to Arthur W. Kelsey, of Wood's pharmacy, New Haven, December 11, at Heublein's Cafe, by nine of his friends. Those present were: J. Stewart Reynolds, A. L. Lockwood, C. B. Somers, Burton Dowke, Arthur Simpkins, J. W. Merwin, Charles E. Stormont, Wilbur Warner, Ernest Thompson. Mr. Kelsey has gone to Providence. Mr. Frank Durham, of Southington, has taken Mr. Kelsey's place at Wood's drug store.

C. C. Lippitt of New London, has been elected druggist of Court Henry P. Haven, A. O. F. of A., of that city. Court H. P. Haven has had a phenomenal growth, one which they are very proud of. It was instituted Dec. 22, 1893, with thirty-four charter members, and it has attained in less than a year, a total membership of 141. The court has taken a five years' lease of commodious quarters on the top floor of the Stafford building. They intend to fit their new quarters up in grand style.

Sylvester F. Wheeler, a well-known chemist of Bridgeport, has discovered the art of making the albumenized paper used by photographers all over the country, an art which until the present discovery has been confined to one or two firms in Germany, and their methods of manufacture has been well concealed. Mr. Wheeler has been experimenting in this direction for about seven years, and it is said by experts that his paper is if anything superior in quality, to anything photographers have been able to secure heretofore. A company has been formed to place the article on the market.

The City Pharmacy of 36 Wall street, Bridgeport, has changed ownership. Messrs. Billings and Clumpett, formerly with L. H. Booth & Co., thinking that there was more money to be made as owners of a drug store than as clerks, decided to launch in the business world by buying the City Pharmacy. They have already thoroughly restocked their store with the articles that a pharmacy should have. They wish the fact known to all that they guarantee their goods as represented, or the money, with smiling faces, refunded. Who doesn't like to see such enterprising fellows succeed.

It has been shown conclusively many times times by eminent physicians and bacteriologists, that the cause for the typhoid fever outbreak at Wesleyan

University, was caused by oysters obtained in New Haven, which had been contaminated by sewage from a house where the disease had been prevailing. Dr. Foote has shown that the typhoid bacillus can live inside the oyster shell. Dr. Foote is the demonstrator of bacteriology in the Yale medical school, and conducted a series of experiments in order to determine the point mentioned. It is expected that Dr. Lindsley, secretary of the State Board, will soon make an exhaustive report in regard to the typhoid epidemic at Middletown.

A pretty wedding took place in New Haven a short time ago in which a popular, young and skilled pharmacist was the groom. Ernest T. Hesse, the head clerk in Trefry's pharmacy on State street, was this lucky individual. He was married to Miss Ella M. Baumann, at the home of her mother, on Nichol street, Rev. Mr. Tinn officiating. Miss Baumann is an accomplished young lady, and is highly esteemed by her many friends. The ushers were Charles McCarthy, J. Harrison and Fred Hesse, and the bridesmaids, Miss Lulu Schroeder and Miss Tillie Piefer. The groomsmen were Charles Berger and Theodore Hesse. They have been away on a pleasant wedding tour.

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OHIO.

CINCINNATI, December 20, 1894.—The officers of the Food and Dairy Commission are still the producers of daily sensations, and each recurring incident of a spicy character causes no end of talk. Notwithstanding the recent exhaustive trial to determine the quality of Paskola, the war against that preparation has not subsided. John Oesper, a clerk in the employ of Miss C. Dow, the pharmacist, is the latest victim for selling this much abused commodity. Oesper was arrested on a warrant sworn out in Squire Winkler's court, and his case is still pending. Messrs. Outcalt, Granger and Hunt, attorneys for the defense, filed a demurrer, which was overruled by Justice Winkler, and the trial will be held January 8. As stated in the last issue of this journal, it is more than likely that Miss Dow, who employs Oesper, will have to stand the cost of litigation, as the Predigested Food Company will not defend any more dealers arrested for selling Paskola.

MISS CORA DOW ON PASKOLA.

"I expected my clerk to be arrested," said Miss Cora Dow, the hustling lady pharmacist, who employs Oesper. "We knew the officers of the Food and Dairy Commission had procured a bottle of Paskola from us and expected arrest much sooner. I have instructed my assistants to keep right on selling Paskola; in fact, we have never stopped selling it. I know of a number of cases in which it is claimed the remedy has done great good. One old lady informed me that Paskola cured her of indigestion of ten years' standing. Like reports have come from other quarters, and I do not see why we should stop selling the preparation. I expect to fight the case in court inch by inch and I believe I will win. I have instructed my attorneys to spare no expense in working for evidence, and we will enlist some good chemists in our behalf."

FOOD AND DAIRY COMMISSIONER CHARGED WITH PERSECUTION.

Since the arrest of Oesper, there have been two other samples of Paskola confiscated by the above named authorities. One sample was brought from Eaton, O., the

other day by Charles Rentrop, assistant to Commissioner Luebing. Another bottle of the commodity was purchased at Martin's Ferry, O. These bottles of Paskola will be submitted to Prof. C. T. P. Fennel, the chemist for the commission for the southern district of Ohio, for analysis, after which the issuance of some warrants will doubtless follow. There is intense local interest as to the outcome of the cases. There have been quite a large number of prosecutions of grocers of late for selling adulterated cloves and other spices, and the daily papers have contained numberless items in reference to the cases. The poor dealers, who are engaged in retail business, are the ones who have been arrested, but in all cases where they pleaded guilty they were let off with the minimum penalty. Despite this fact the officers of the Food and Dairy Commission have been charged with persecution.

THEIR ATTITUDE EXPLAINED.

In order to set the retailers right, the officers of the Food and Dairy Commission have explained in the daily papers that they would be only too glad to arrest the wholesalers, but that they can only get at these tradesmen through the retailers. Assistant Food and Dairy Commissioner has repeatedly stated that the State would furnish a chemist and an attorney to any retailer who desired to prosecute a jobber. This offer was made to show that the retailers have not been picked as a "mark," as it were. In his speech at Marietta, Judge Dye explained how difficult it is to obtain samples of products from the wholesalers, and stated that the way for the retailers to do is to sue the jobbers when they are victimized in the purchase of impure goods. This speech completely turned public sentiment in favor of pure goods and the upholding of the pure food laws.

MOVING AGAINST LIQUOR DEALERS.

The largest crusade yet inaugurated here, however, is that against impure and adulterated liquors which is now being waged. About a dozen liquor men have been arrested and all who have been arraigned for trial have pleaded guilty and received the lightest fine possible. The heaviest penalty was received by Bert Klein, of Fourteenth and Vine streets, who pleaded guilty on three counts and was fined \$100 and costs on each count. This is the minimum penalty under the wine law. It is said, however, that Klein's fine was paid by a well-known firm of rectifiers, who started him up in business.

The case of the State against Druggist Allen for manslaughter, mention of which appeared in the last issue of this journal, is still a leading theme among physicians and druggists. Messrs. Shay, Jackson & Cogan, who have been retained to defend Allen are known as fighters and they declare they will win their case in court. It will be remembered that Allen filled a prescription for pyrozone which resulted in the death of the person who used it. It has been claimed all along that the ether in which the pyrozone was put caused the fatal explosion, but recent explosions of hydrogen dioxide have caused some persons to doubt the above theory. A number of druggists have been interviewed in reference to the action of Allen and they all hold that he is not to blame. The outcome of the case will be awaited with interest.

A FEW CHRISTMAS GIFTS.

Druggists report business as picking up. The long-haired girl is a winner with a big W.

Mueller's pharmacy at 216 Race street is now the cynosure of all eyes.

All the local drug drummers are here to spend Christmas with their families.

The holiday season has been the means of booming matters for the suburban pharmacists.

The Drug Clerks' Association is now said to be a thing of assured success, as a meeting has been called.

Druggist Harry Streithorst, the most popular man over the Rhine, has joined the Ancient Essenic order.

Ex-Coroner Bangs has refitted his drug store on Vine near Fourteenth street. The pharmacy is now up to date.

The store of Dow, the cut rate druggist, on Race street, has been enlarged by the removal of a large stairway.

The liquor men are organizing to defend themselves in the prosecutions, to be caused by the Food and Dairy Commission.

Keasby & Mattison, of New York, have opened a branch office at 114 West Second street, with W. F. Miller in charge.

Coroner-elect Haerr, who takes great interest in affairs pertaining to the drug business, goes into office in a few days.

Werner and Simonson, the pharmacists at Ninth and Race streets, have put in a new drug mill in their handsome store.

Prof. C. T. P. Fennel, the well known chemist, was in Marietta, O., last week, prosecuting the dealers in impure goods.

George Kylius, the clever West End druggist, gave a card party at his home a few nights ago in honor of Mr. and Mrs. Gates.

Druggist R. H. Weatherhead, of Sixth and Vine streets, who recently remodeled his store, has the finest cash register in the State.

The Kingery Manufacturing Company is selling ice cream freezers and ice shavers in large quantities, notwithstanding the season.

Serodina's drug store is rapidly nearing completion. It is to be the finest pharmacy in the city when completed. "T will be a peach."

Dr. John C. Otis, the clever physician-druggist, has made a number of changes in his drug store. The place is much improved.

Dr. Louis C. Sauer, the well-known pharmacist, has put an aquarium in his handsome pharmacy at Baymiller and Central avenues.

Doctor Charles Wocher, the well-known physician-druggist at Seventh and Main streets, is remodeling his store. "T will be a hummer."

Ed. Voss, the well-known pharmacist at Twelfth and Vine streets, will have his fine Irish setter on exhibition at the coming bench show.

Johnny Bauer, after working for several months, has succeeded in finishing the hard wood fixtures in his store at Sycamore and Milton.

W. S. Wagner, the pharmacist at Seventh and Vine streets, has purchased a new soda fountain from the Low Art Tile Soda Fountain Company.

J. H. Day & Company, the manufacturers of sifters and the like, have recently received orders from Europe and other foreign countries.

"Kathleen's Family Circle Story Paper" looked brighter and nicer last week than at any time since its first appearance. The editress is a hustler.

The elegant new show cases in Weathercad's drug store were made by Schmidt,

the well known show case manufacturer of this city. They're fine.

W. S. M. Gordon, the glycerine maker, has taken the first prize at the Mid-winter fair at San Francisco. This makes several medals for Brother Gordon.

Wilmot J. Hall, who presides over the destinies of two swell drug stores on Fourth street, is preparing some novel advertising matter for Forbes' Diastase.

The well-known Philadelphia house of Keasby & Mattison have opened a branch office on West Second street, as noted in another column. Their Western business has increased greatly during the past few years.

Jason Evans, who recently sold his drug store at Fifth and Walnut streets to Herman Serodina, is now running a first-class pharmacy at Delhi, O. He could not remain out of the business after so many years in harness.

Billy Hale and C. P. Calvert, both prominent wholesale druggists, are great chums, and they always dine together. After business hours they generally go to the theatre together when both are in town.

Most of the down town drug stores have large displays of holiday goods and reports from all quarters show that business is very good. The elaborate display of elegant toilet cases and other sundries is larger than for several years past notwithstanding the existence of the big department stores, which are expected to monopolize this class of business.

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MICHIGAN.

DETROIT, Dec. 22. — When the readers of the AMERICAN DRUGGIST see this, Christmas will have come and gone. The pleasant remembrances of the holiday will still be fresh; also the disappointments if there be any. But at the present writing, all is bustle and hurry here, and everybody is preparing for the event. The greatest signs of activity may be noticed in the business world, and although it is looked upon as an off year, still many firms have made extraordinary preparations in anticipation of a big trade. The department stores are filled from top to bottom with holiday goods, and even the druggist has laid in a goodly supply of sundries with which to catch the eye of the passer by. One of the noticeable customs which the druggists of this city, and especially of the down town dealers have adopted, is the transformation of their stores and windows into veritable flower gardens. Not only are cut flowers of the choicest variety on sale but potted plants as well. It is certainly a most pleasing custom; and that it is appreciated by the public is shown by the way in which it is patronized.

THE ABUSE OF BROMIDES.

"The use of bromides is becoming alarmingly general," so said a local dealer to the correspondent for the DRUGGIST recently. "They produce an intoxication very similar in outward effect to that brought on by alcoholic stimulants, but in their ultimate results it is still worse. Bromides directly affect the nervous system, and the almost inevitable result of their excessive use is insanity or epilepsy. Many druggists here have a number of customers who take bromides regularly, and even when warned against them by competent persons, the victim appears to be unable to shake off the habit. There is nothing particularly fascinating about their taste, but the effect is to temporarily quiet the nerves, but the lasting result is to leave them in a worse shattered condition than before.

SOCIETY FOR THE COLLECTION OF DEBTS.

There is a society in Detroit which has for its object the collection of doctors' bills. There ought to be one for the collection of bad druggists' bills, but it is doubtful if a satisfactory system of getting people to pay up could be devised. The society in question performs the clerical, financial and legal work necessary to the conduct of the business affairs of the medical practitioners. In spite of all this, however, physicians when they strike a balance, find that they have almost as many bad debts on their books as before. The plan of the doctors appears to be excellent, but it seems to lack one essential, which is to give special reports in advance on the financial condition of patients. This is the plan adopted by commercial agencies.



*Charles H. Green
Mgr. Dabrooks' Perfumes.*

Charles H. Green was born at Albion, Mich., in 1867, whence he removed with his parents to Homer, Michigan, attending school until 14 years old, and learning the shoemaker's trade, at which he worked until 16. He had long wished to enter the drug business, but no opportunity presented itself until 1883, when he entered the drug store of C. M. White, of Homer. He remained but a short time when he went to Chicago and secured a position with Thos. Whitfield & Company, with whom he remained for three years, working up through the various positions until he became head prescription clerk. After passing the examination required for registration to practice pharmacy in Michigan, he made an engagement with A. S. Parker, druggist, 747 Woodward avenue, Detroit, with whom he remained for some time. He accepted a position with Foote & Jenks, manufacturers of perfumes, and introduced their goods through the West. After a year's travel with them he made an engagement with the old and well-known perfumery house of Lazell, Dalley & Co., with whom he continued for three years. January 1st, 1893, he accepted a position as manager of sundry department for Messrs. Williams, Davis, Brooks

& Co., Detroit, Mich. It was during this year that Mr. Green's services were found exceptionally valuable, as through his efforts, Dabrooks' Perfumes, were put on the market, a line that promises lively competition for some of the old established perfumery houses.

By January 1st, 1894, the perfume business had assumed such proportions that it was decided to separate this from the other business of the firm. This department was placed under the management of Mr. Green he discontinuing his relations with the sundry department. By enterprise, push and free use of printer's ink, a large perfume business has been built up in a short time.

January 1st, 1893, Dabrooks' perfumes were not known outside of Michigan, today, less than one year, finds them known and sold in every State in the Union, Territory and New Mexico. This business is established on a solid foundation, as the quality of the goods, and handsome style of package, guarantee a permanent interest in all who purchase them.

Mr. Green is a thorough believer in advertising, and that "only live fish swim up stream," a characteristic easily detected by the success of this business. He is so well known to the drug trade of the country, and especially to the trade of his territory, viz.: Michigan, Ohio and Indiana, that he needs no introduction. He is fond of music, plays the mandolin like an artist, is a veteran of the Detroit Light Guard, Company A, Fourth Regiment, M. S. T., and a member of the Michigan Pharmaceutical Association. He is married and has one child.

CHEATING A WOULD BE SUICIDE.

A young man with a troubled countenance recently entered the store of a Bagley avenue druggist and in a suspicious tone of voice asked for some arsenic. His general demeanor did not denote that he was a man of family, so the proprietor guessed that he wanted to kill something else besides rats. Accordingly he walked behind the prescription counter and put up a small package of powdered chalk, which he labelled arsenic. The young man put it in his pocket with a degree of satisfaction that was noticeable and started briskly for the door. As he opened it something evidently crossed his mind, for he shook his head and his eyes took on a far-away look. Slowly he walked back and said he thought he would take a few strychnine pills. The druggist promptly put up a few compound cathartic pills and charged the genuine price, which was cheerfully paid. Doubly armed this young man walked out, but if he attempts to commit suicide with the two combinations he will wish he had never been born.

THE NEWS IN BRIEF.

Randolph & Company have started a new drug store at Northville, Mich.

Dr C. E. McAvoy, the Parnell physician, has put in a complete line of drugs.

Fire recently did \$100 worth of damage to Bang's drug store at Grand Rapids.

Jacob Janson, the Muskegon druggist, has moved his family to Los Angeles, California.

Quincey A. Haynes, the Delton druggist, died recently from a sudden attack of heart disease.

C. E. Blakely, the Maucelona pharmacist, last week purchased holiday goods at Grand Rapids.

It is announced that Prof. Oscar Oldberg is to assume editorial charge of the Bulletin of Pharmacy.

I. A. Damon has gone into the drug business at Weidman. He moved his stock from Hubbardston.

Thomas Duggan has started a drug store in the new Griffin Block at Flint. He put in an entirely new stock.

Druggist Harrison at Vassar, Mich., recently lost his mother by death. He has the sympathy of the trade.

J. G. Hackney, formerly of Detroit, is now in the employ of the Central Drug Store at Marine City, Mich.

Herbert Bradley, of Williamston, left last week for Wakely, where he has accepted a position in a pharmacy.

D. W. Allen recently started a new drug store at Bangor, Mich. It is said to be one of the best in Van Buren county.

H. W. Rodenbaugh, of Breedsville, druggist, mourns the death of his wife, which was caused by quick consumption.

W. B. Conley will shortly open a drug store at Whitehall, Mich. He was formerly in the same business at that place.

At the merchants' carnival, recently held at Hilledale, John G. Wolf, the druggist, took the first prize for the artistic display of goods.

H. Kinney has removed his drug business from Corunna to Tekonsha, where it will be conducted under the firm name of Johnson & Kinney.

Charles Woods, who recently started a retail drug store at Mason, is nicely located and has secured part of the best patronage in the city.

E. L. Church, the jeweler at Union City, has rented half of the store of Druggists Hubbard & Wilkins, and will move his stock shortly.

Barney & High, of Battle Creek have purchased the interests of Mr. Kirkpatrick and the firm will hereafter be known as Barney & Kirkpatrick.

The Thompson pharmacy at Lansing has been sold to James Baird of that city, who will continue it under the management of a first-class pharmacist.

John G. Hackney, the Detroit druggist, recently discharged a chattel mortgage on his stock amounting to \$2,500, which was held by Haste & Harris.

J. H. Lewis, of Koscusko, Miss., will shortly take entire charge of the sale of Gunthrod's powder folder in the United States. The firm manufactures in Detroit.

The drug store of H. M. Dean & Company at Niles, Mich., has been thoroughly overhauled during the last two weeks and the store now presents a most pleasing appearance.

Stoughton Rose, of Traverse City, will hereafter manage the drug business of B. H. Rose & Company. His father has gone to Sherman where he has taken charge of a hardware business.

E. R. Beal of Ypsilanti, has purchased the A. L. Smith stock of drugs there, and will continue the business with F. H. Barnum & Company until Jan. 1, when the stock will be removed to Britton.

The A. I. McHenry Pharmacy Company have opened a drug store at Traverse City. Ives & Owne of Belding have moved their stock from that city to Traverse City. They occupy quarters on Front street.

Hyndman & Giddings is the name of a new drug firm at Jackson, Mich. It is an old business under a new management. Mr. Martin, a former partner, sold his interest to r. Peter Hyndman of Tompkins.

The Hazelton & Perkins Drug Company at Grand Rapids, Mich., recently furnished a new stock to William Legate, who has

started a store in that city at the corner of Division street and Stewart avenue.

Victor Keller of Detroit was recently fined \$25 for violating the pharmacy law. Edward Ledwitz, his clerk, was fined the same amount. He was accused of selling tincture of rhubarb without a prescription.

On December 6, Charles H. Law & Company embarked in the drug business at Menominee, Mich. Mr. Law is a practical pharmacist and is well and favorably known in that city. The new firm starts off under auspicious circumstances.

Nutt, the druggist, at Cheboygan, recently had a nasty time with a polecat which entered his store. It stayed there over night, and he has been trying ever since to kill the aroma by burning all sorts of concoctions upon the stove.

T. D. Quinn has started a drug store at Lansing, Mich. He was formerly engaged in the business at Muskegon and only recently removed from that city. He had been engaged in the retail drug business there for twenty years, and as a doctor.

Bert Johnson, of Leslie, was recently arrested on the charge of entering the drug store of William Hutchins at that place while a fire was in progress in the store. The young man was accused of stealing a bottle of liquor. He paid a fine of \$15.

A stranger recently succeeded in obtaining \$5 and some goods from Stevens & Todd of Detroit on a forged check. Several other merchants were also victimized. He was captured, but allowed to escape, as he walked out of the central police station right under the officers' noses.

I. G. Johnson's drug store at Traverse City was recently destroyed by fire. Since that time work has been rapidly pushed on the work of redecorating and getting the store again into shape. Mr. Johnson says he expects to have things in better shape than ever in a few weeks.

On October 8 George Allen succeeded in swindling Farrand, Williams & Clark out of a quantity of gold leaf by using a forged order from the firm of Newcomb, Endicott & Company. He was arrested and found guilty of the charge. Judge Whalen sentenced him to ten years at Jackson prison.

Dispatches to Detroit papers recently announced the death of Otis Merrill at Owosso, Mich. He was proprietor of the Merrill House at that city, but was a former druggist at Detroit. He was a graduate of the Agricultural College at Lansing and also of the pharmacy department at the University of Michigan.

George Staeker, Herman Noecker, Herman Raibley and Charles Cuency, all employed as drug clerks in Detroit, were last week arraigned in the police court, charged with selling or allowing to be sold tincture of valerian without the certificate required the State pharmacy law. They were released under \$200 bail.

Druggist Dr. Henry Haigh, who keeps a drug store at the corner of Brush street and Jefferson avenue, recently had an experience with burglars. One morning last week they entered his residence at 1886 Woodward avenue and stole his clothing and a quantity of jewelry. He recovered part of the booty from a second hand store.

Henry J. Hudnut, the Hanover druggist, recently went to Chicago to have a surgical operation performed. He died from the effects and his remains were brought to his old home for interment. He recognized the danger of the operation and made all his preparations for death. Mr. Hudnut left an estate valued at \$15,000.

Dr. B. G. Watson, of Benton Harbor, has opened a new drug store at Eau Claire.

They have installed an entirely new stock of drugs and sundries, and occupy the Welsh Building on Main street. There is a good opportunity for a pharmacy business at Eau Claire and the doctor sees his opportunity. Albert H. Berger, formerly of Harry Bird's pharmacy at Benton Harbor, has taken charge of the establishment.

G. W. Saunders, of Riverdale, recently sold his drug store there to Dr. C. P. Sayles of Kalamazoo, taking as payment two notes secured by Grand Rapids real estate. Sayles shortly afterwards sold the drug stock to one named Kingsbury at an advance of \$50 over the purchase price. Kingsbury began to make preparations to move the stock by packing it up. Saunders, the original owner, became alarmed and took a trip to Grand Rapids to look up the real estate, which secured his two notes. When he arrived there he found that Sayles had sold the property two years ago, and that consequently the notes were worthless. Mr. Saunders immediately began proceedings to again get possession of his stock of drugs. The matter has become involved into considerable of a legal tangle.

J. D. Meinhardi, a German doctor and druggist of Whitehall, had rather a rough time of it since coming to this country. Some time ago he invested several thousand dollars in the drug business there and since he has had no end of troubles. The ball was first set rolling by an amateur detective getting the doctor to sell him a glass of whiskey when he had no license. The little affair is said to have cost him \$500. One evening not so very long ago that same detective was standing in front of his store when a handful of red pepper was thrown in his face. A hand-to-hand fight took place in which Meinhardi got the worst of it. The young sleuth was arrested, but the jury failed to agree. Then Meinhardi discharged his registered pharmacist and it is alleged, began to compound his own prescriptions. He was arrested and the complaining witness is A. E. Ewing, attorney for the State Board of Pharmacy, who alleges that he sold him morphine and iodine. The doctor pleaded not guilty and was tried at Muskegon. He was fined \$40 and costs.

MISSOURI.

ST. LOUIS, December 18.—There is a trial soon to come off in our Circuit Court which is of very great interest and importance to all druggists and has caused quite a sensation in local drug circles. About two months ago a professor in one of our medical colleges used a "private formula" in a prescription at their clinic. The formula was only known at the College Dispensary. The patient not having enough money to have the prescription filled at the dispensary gave it to an intimate friend, who was a Ph.G. and registered in this State, who claimed that he could get it filled all right at another drug store. This friend, who is not in the drug business at present, took the prescription to one of our leading pharmacists, and an intimate friend of his, telling him to fill it and giving him a formula which he claimed to be the private one the doctor used. The prescription was filled accordingly and now two months later the patient comes up and sues our druggists for five thousand dollars damage, claiming that the prescription was incorrectly filled and the health of the patient injured in consequence thereof. It is the general belief that the doctor is the instigator of the whole trouble; and at any rate since he is finding himself so severely denounced by the whole pharmaceutical pro-

feasion of the city, he is trying very hard to compromise the case. The druggist will undoubtedly come out ahead, but as the affair was thoroughly ventilated and badly mixed up through our daily newspapers, it will of course injure the druggist, as the public always hears and credits the wrong side of such stories.

EDUCATED NOSES.

All the druggists throughout the State of Missouri who have the least idea of attending the meeting of the Missouri Pharmaceutical Association at Excelsior Springs next June, are getting their olfactory organs in good trim and practising the recognition of drugs, etc., by means of the sense of smell. The cause of this is that the Meyer Bros. Drug Co., of this city has offered a prize of fifty dollars in gold to the druggist recognizing the largest number of drugs, at this meeting, by the sense of smell alone. Each candidate will be blindfolded and taken separately into a room where, before a committee of five judges, he will be given a certain number of samples to smell of and his record will be taken. The person recognizing the greatest number of samples will receive the fifty dollars.

MORE PRIZES.

Another interesting contest for which there are prizes offered, is the measuring off of definite weights of powders, such as quinine, calomel, etc. The applicant will be given a spatula and told to measure off, say, five, ten or twenty grains, of certain powders, and then his accuracy will be tested with a pair of prescription scales. The party proving himself the most expert at this will receive a prize of a certain amount of money which has not been determined as yet.

THE ALUMNI ASSOCIATION.

The Alumni Association of the St. Louis College of Pharmacy, will hold their third monthly scientific meeting, season of '94-'95, to-night, at the College of Pharmacy. Prof. Amand Ravold, M. D., of the St. Louis Medical College, will deliver a lecture on "Bacteriology, with special reference to the Bacillus of Diphtheria and the New Serumtherapy." Dr. Amand stands high in his profession here in the city, and as this is a very interesting subject just at present, there will probably be a large attendance.

A SOCIETY DEBATE.

The Omega Phi Society of the St. Louis College of Pharmacy, has departed from its regular programme for this week, and will have a debate instead of a quiz. The question to be debated is:

Resolved, That it pays a young man, intending to be a druggist, to take a course at a good college of pharmacy.

The members have just received their pins, which are very similar in design to the original one first designed by Dr. O. A. Wall, the boys' favorite professor.

THE COLLEGE WORK.

The St. Louis College of Pharmacy is just closing the first half of its year's work, and it is declared by both students and faculty that it has been the most successful year, so far, in the history of the institution. Only one scholar, of the two hundred and fifty-three who matriculated at the beginning of the year, has fallen from his class, and that was due to sickness. Usually, sickness takes a number from the roll, and there are nearly always a few "faint hearts" who become discouraged and give up the profession; and very few years pass without death taking one or more of our boys from our classes.

THE DRUG CLERKS' SOCIETY.

The St. Louis Drug Clerks' Society held another enthusiastic meeting on the 11th inst. E. A. Sennewald, secretary of the Missouri Board of Pharmacy, was present and gave the members quite a talk on the way he finds different drug stores run throughout the State. He spoke of the new pharmacy bill, but as this subject had been thoroughly ventilated by Prof. Hemm at a previous meeting, he did not spend much time discussing it. Probably the most interesting part of the evening programme was the reading, by Mr. Sennewald, of two letters which he had received from parties in different sections of the State. The first gentleman offered Mr. Sennewald fifty dollars for a certificate, while the second applicant went him "one better," and said he would send the secretary a check for two hundred dollars if he could be assured that he would receive a certificate of registration by return mail. The secretary said that he quite frequently receives such letters as these. Under the head of miscellaneous business, R. S. Vitt brought before the house for discussion the subject of having certificates of membership issued so that each member who so desired could add one more sheepskin to his collection. If they decide to adopt this plan they will get up a very handsome parchment or sheepskin certificate—one that will be ornamental. The meeting concluded with a general "story-telling match," and it was decided that President S. E. Barber was the champion, while Joseph Boehm—son of College Trustee Boehm—came in for second honors.

MEDICAL ETHICS.

The druggists throughout the State, are watching with considerable interest, the proceedings of the St. Louis Medical Society against one of their members, the superintendent of our city hospital, who is charged with breaking their rules of ethics by advertising himself through the city daily papers. The papers frequently contain long accounts of surgical operations, etc., performed in this institution, and of course the superintendent's name is always very conspicuously brought out in connection with the cases. The superintendent is soon to be tried before the society but it is impossible to tell how the case will be decided. Many of the members claim that as this is a public city institution, the public should know what is transpiring within its walls and that the doctor has not violated the code of ethics in allowing his name to be used in connection with the cases; others claim he is doing it merely to advertise himself.

"FROG IN YOUR THROAT?"

Quite a number of our local druggists are exercising their ingenuity in window dressing in competition for the prize offered by Hance Bros. & White of Philadelphia for the best advertising display of "Frog in your Throat?" Competition for the prize is open to all retail druggists in this city, and many of the displays show considerable ingenuity.

DRUG ADULTERATION.

The Drug Adulteration Committee of the Missouri Pharmaceutical Association is hard at work. The chairman, Prof. Francis Hemm, has assigned each member of the committee a certain department to be thoroughly investigated and is in constant communication with them in regard to their progress.

As the council of the American Pharmaceutical Association now have the date of their next meeting under consideration, and it has been learned that June 19 will probably be decided upon, the Missouri

druggists are talking of trying—in case June 19 is selected as the date—to induce the Eastern and Northern delegations to the American Pharmaceutical Association to start a little earlier and visit the Missouri Association, which will hold their convention at Excelsior Springs the week prior to this date.

NEWS ITEMS.

Mr. Johnston will go to New York and be connected with one of the largest firms of that city.

Dr. Owen, formerly of Rolla, Mo., has recently purchased the Lyon drug store, 8018 S. Broadway.

Dr. F. L. James, editor of the National Druggist, has just gone down on the Gulf coast to spend the holidays.

Jacob Friez, Ph. G., the good looking druggist at 1224 South Fourth street, is down the Black River, Mo., gathering up a supply of bear of Xmas.

R. S. Johnston, the well known gentleman at the head of the City Department of the Meyer Bros. Drug Co., has resigned his position, to take effect Jan. 1st.

J. Weinsberg, druggist at Tenth and Manard streets, was down buying a new buggy to-day, as his horse took fright, ran away and completely demolished his other rig.

C. E. McDonald, of the West End Pharmacy has been carrying his hand in a sling for the last few days, the effect of an explosion in opening a bottle in his laboratory.

Dr. and Mrs. H. M. Whelply leave Friday the 20th for his old home in Southern Illinois, where they will celebrate Christmas and then take a week's hunting trip down in the spurs of the Ozark mountains.

Dr. C. A. May, for some time a druggist at Yankton, S. D., has just purchased the store belonging to the J. S. Merrell Drug Co., at Broadway and North Market street. This store was thrown on to the Merrell Drug Co.'s hands last June.

They had quite a little scare and considerable fire at the Friedewald Pharmacy, Nineteenth and Chateau avenue, this morning. They had their front window pretty well filled with Xmas goods and in some way fire got started and completely destroyed the goods in one window.

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Requirements for Registration in Ohio.

The Ohio Board of Pharmacy has issued the following circular of information to intending applicants for registration:

Every person desiring to register as a pharmacist in this State must be of the age of twenty-one years, and must have not less than three years' experience in the actual practice of pharmacy.

Every person desiring to register as an assistant pharmacist must be of the age of eighteen years, and must have not less than one and a half years' experience in the actual practice of pharmacy.

Persons who have attended schools or colleges under instruction in pharmaceutical science may obtain credit upon these requirements for the actual time so spent, provided a certificate to this effect from the responsible head of the school in which the applicant has been under instruction is filed with the application for examination. The law requires every person to pass an examination as a condition of registration.

Examinations will be held by the Board during the year 1895, as follows: Cincinnati, Tuesday, Jan. 15; Columbus Tuesday, May 14; Cleveland, Tuesday, October 15.

ILLINOIS.

CHICAGO, December 20.—The trade in holiday goods has been excellent, despite hard times and talk of little money. It was predicted about the time of the great railroad strike that the depression of last winter would be multiplied many times in Chicago before this winter had passed, owing to the additional causes and extreme conditions. Such is not the case, however, as borne out by the present condition of things. This is easily proven by the fact that the community and, it might be said, the nation, had "blown itself" on the World's Fair, while during the past year trade has not been so exceedingly dull by any means and this fall has materially picked up. Many druggists who have, since being in business, carried a large line of holiday goods, and who decline to take any chances on them this year, are now living in the atmosphere of their own disgust, while all the pretty things displayed on the counters of their neighbors are being rapidly disposed of. To see the crowds on the business streets, with arms full of bundles and still looking for more, leaves no thought of hard times, but goes to show that prosperity has not deserted this part of the country.

LIQUOR DEALERS VS. DRUGGISTS.

The prosecution of local druggists by the Liquor Dealers' Association in this city has fallen rather flat, the only ones deriving any profit or benefit from the action being the spotters employed by the association. The prosecution started in by securing warrants for the arrest of a score of druggists on the charge of violating the laws which restrict a druggist from selling liquor except for medicinal purposes and require registry each sale. In one instance only, when the cases came for trial did the prosecution gain anything, and that was where it was shown that no record had been made and that the customer had not been asked the purpose of the purchase. All the other cases were dismissed for lack of evidence.

OPPOSITION TO THE DENTAL TRUST.

In about a month the manufacture of teeth will be begun in this city at a new factory just completed for the purpose. The building is already erected, and the furnaces will be in place in a short time. It is located at Twenty-sixth street and Wentworth avenue, and it is said that the effect of its presence has already reduced the dental trust price 3 c on a tooth. The product of the new factory will be sold only to the Dental Effective Association, which has grown to be a powerful body since its inception. It now numbers 3,000 members throughout the country, and President Grouse says that it will grow to 10,000 before anything like the limit is reached. The object of the Association is to defend its members from lawsuits brought by manufacturers and others, claiming to have patents on certain material and articles used in dental work, most of which the organization claims are now new inventions and has so proven in court. The Auxiliary Supply Company is an outgrowth of this movement, and another auxiliary will be the Dental Digest, an official monthly magazine which will make its first appearance some time in January.

A NEW CONFIDENCE GAME.

Thieves in Englewood are working a clever scheme by which druggists, doctors and ordinary citizens are getting the worst of it. The gang includes men and women. The method has been for one at a late hour to call up a druggist by telephone, and telling him that a fire is raging at a certain

point, asking him to notify the owner, who lives in the near vicinity. The confederates are waiting close by. As soon as the druggist starts on the errand, he is either held up or robbed, or his place is looted. The other scheme is for a woman to call a doctor, and giving the name of a patient, telling him that she is in a serious condition and that he must come at once. This may result in his being assaulted and robbed, or his office entered and cleaned out. The last one to fall a victim was Druggist B. Jerke, 5801 Halsted street, who was held up the other morning in the shadow of his own door and everything taken from him.

"SOUTHWORTH" LEGISLATION IN CHICAGO.

An important opinion has recently been prepared by Corporation Counsel Palmer for Commissioner Reynolds, of the Department of Health of Chicago, which will be received as of great importance by the druggists of this city. An effort has been made by the commissioner to secure from each druggist a formula of every kind of proprietary medicine offered for sale by such druggist, and, on being refused, asked that an ordinance be prepared and submitted making such requirements, and prohibiting the sale of such goods not described to the department. The legal representative of the municipality decided that the city had no right to make such a demand or to pass or to enforce such an ordinance. This is probably a death-blow to an attempt to muzzle the druggists.

NEWS NOTES.

At a late hour of the night of December 14th, the drug store of J. H. Wilson, 125 Thirty-second street, was entered by burglars, and goods to the amount of \$50 carted away.

Dr. Walter A. Sempill, of the firm of Dale & Sempill, has placed a new desk in his establishment, and it is to be hoped that he will never return to the dingy old affair that has served him many years.

H. W. Matthews of the Morley Drug Co., has been East in the interests of his concern for the past two days. It is reported that he has closed several new accounts, for his concern to represent in the West, during his stay away.

Mr. Lewis, Johnson & Johnson's famous belladonna plaster salesman, says: "Trade keeps up, and, sorry, but have no time to talk; just say its hard to get the goods fast enough; guess we will have to build another addition on to the factory at New Brunswick; ta ta; start on another round to-night; Cincinnati first stop."

John F. Matthes, manager of Whitall, Tatam & Co., reports business as very good and the outlook for '95 most encouraging. Mr. Matthes has represented W. T. & Co. in this city for nine years, and now has several men out hustling for orders. The branch shows a most excellent growth of the business since he took charge thereof.

E. R. Baker, 1301 Jackson street, Chicago, manufacturer of Smith's "Ideal" Price Marker Outfit, issues a neat pamphlet bearing the title "A Booklet of Suggestions." The pamphlet will be useful to those who use printed price and display cards, as facsimiles of work done with the price marker outfit are shown, and it contains many suggestions of value.

H. B. Williams, Chicago agent for the wholesale drug house for Frederick Stearns, and Company of Detroit, has been arrested in this city and taken back to Detroit on a charge of embezzlement. The accused is a fine looking young man, well dressed, and had no traces of the criminal about him when placed in custody. Having no reg-

ular office, he made his headquarters at the wholesale house of The Fuller & Fuller Company, and was arrested at that place.

It has virtually been decided by the faculty of the University of Illinois, the trustees of that institution and the faculty and assistants of the College of Physicians and Surgeons of this city, to ask the assistance of the legislature in attaching the latter institution to the former as their medical department. The purchase price will be about \$160,000 and is considered a wise investment.

Dr. O. W. Cummings, who owns a drug store in Buda, Ill., 117 miles from Chicago, has been held to the Federal grand jury on his own recognizance, on the charge of selling liquor without paying the government tax. Buda is a local option town, and a witness at the preliminary examination testified to purchasing whiskey containing pepsin. Dr. Cummings does not deny selling the liquor, but says he was careful to inquire if it was wanted for medicine.

G. F. Berger, the young student at the Rush Medical College, who was recently charged with embezzlement, denies the charge. Adam Boedel, a Milwaukee jeweler, brought the charge, claiming that while Berger was in his employ he took funds belonging to his employer, and has made no attempt at restitution. Berger acknowledges a former shortage, but insists that it was satisfactorily adjusted and that Boedel is persecuting him.

The following incorporations have been announced recently: Gillett & Hill Co., at Chicago; to manufacture food and chemical products; capital stock \$100,000; incorporators, Leroy D. Thoman, William S. Oppenheimer and Fred W. Harnwell. Iuka Chemical Company, Iuka; capital stock, \$30,000; manufacture drugs and chemicals; incorporators, O. Irwin, C. H. Neff, H. C. Irwin, C. A. Neff, J. M. Irwin. Women's Medical Supply Company, Chicago; capital stock, \$1,000; incorporators, Emil Hammerman, Johanna Hannemann and W. H. Bradley.

Two weeks ago Louis Mandel, manager of the Auditorium Pharmacy, decided that things were getting too warm for him, and disappeared. An examination of the books and an inquiry resulted in the announcement that he was at least \$3,000 short. It may never be learned just how much the shortage is, as he was general manager of the store and had complete charge of the cash and everything else. He was quite a sport and is said to spend a great deal of money on women, although a married man, and living in a fashionable boarding house on Prairie avenue. He was accused by his employer, and confessed everything according to the latter, but disappeared before a settlement could be arranged.

One of the most busy offices in Chicago is that of Wm. R. Warner & Co., in charge of A. E. Remick. Mr. Remick is known all over the West as a "hustler"—he started in the retail drug business in Southern Illinois some eighteen years ago, then went to Kansas City and opened a drug brokerage business. It was here that Warner & Co. discovered him and the result was that he was soon on the road for them. In December, '82, they decided to open an office here and selected Mr. Remick to take charge of it. Under his management from merely desk room in the Tremont House they have now a large store with a full line of their well known goods. Mr. R. says that their business has nearly doubled during 1894.

The Illinois State Board of Pharmacy examined a class of eighty-five at their November meeting in Chicago, and of this number the following eighteen were suc-

cessful: Grant Burkitt, Fred P. Bodinson, Carl F. Fischer, Frank Griffith, John P. Grimes, B. A. C. Hoelzer, Phil. C. Huebner, John E. Kraft, Louis Lowenthal, Fred H. Liess, Chas. F. Schmerker, B. A. Spees, John Stuchlik, and C. C. Wilkins, of Chicago; H. D. Morris, St. Joseph, Mo.; E. C. Pawley, Clifton, Ill.; Lewis H. Rice, Aurora, Ill., and F. E. Sahland, Golden, Ill.

The next meeting of the Board for examination will be held in Room 3, State House, Springfield, Jan. 8, 1895.

The second meeting of the Board for examination will be held at 173 Thirty-ninth street, Chicago, Feb. 12, 1895.

NOTES ON PRICES.

A new source of revenue for drug stores, and one that will attract a money-spending class, is offered by a novelty that is advertised on the last cover page. We refer to Apollinaris "Splits" (half-pints), which can be profitably used to accommodate such of the lovers of Apollinaris as prefer to drink their beverages in drug stores.

Wholesale Druggists' Prices.

The following changes in the Prices Current, represent the important fluctuations in the prices at which retailers usually purchase goods in ordinary lots:

BALSAM PERU is in less abundant supply and prices are a shade higher; quoted \$1.90@2.00.

BENZOIC ACID, German, has declined to 65@70c.

CASSIA BARK, bark in mats is higher on account of scarcity, and we now quote the range at 10@12c.

CHAMOMILE FLOWERS, German are in better supply and prices are easier with 25@30c. now quoted.

COBALT, powdered in small lots is advanced 4c.; now quoted 18@25c.

OILS.—Bergamot is a trifle easier with supplies obtainable at \$2.20@2.40. Cassia oil is weaker and quoted \$1.35@1.50.

OPIUM continues firm, and slight advance is noted over previous quotations; quoted \$2.60@2.75.

New York Prices.

Wm. H. Raser, drug broker and commission merchant, 32 Platt street, New York, in his December circular, comments upon the fact that the usual December dullness has settled upon the trade and there is little of interest to chronicle. Regarding opium, he says, the foreign advices continue very strong; last cables being higher than present quotations in this market. Single cases now quoted here @ \$2 40 (some business having been done the past few days @ \$2.35, and possibly \$2 37½ may yet buy), but the tendency is higher and some holders are now asking \$3 45 to \$3.50; broken lots are selling at \$3.40 @ \$2 45, but most holders are asking more. Pure powdered opium at \$3.85 @ \$2.95 as to quantity and holder, with \$3.00 and upward asked. Quinine is dull and without new feature, and quotations are unchanged at 24c. @ 24½c. for foreign bulk as to brand and quantity, and for prompt cash round lots are procurable at 28½c., and possibly less at this time. Citric acid: makers have reduced 1½c. per lb., and now quote 86½c. @ 87c. Tartaric acid, I can shade manufacturers' figures a fraction for a few barrels only. Cream tartar unchanged at 17½c. @ 18c. for crystals and powder. Balsam fir, Canada, lower offerings at sources of supplies and easier here. Carbolic acid, crystal beat

English in 1 lb. bottles at 18c. Colocynth Apples, Trieste, are scarce and further advanced. Oils, Anise and Cassia are lower. Peppermint is unchanged: Cubebs, Clove, Sassafras, Winter Green and other Essential Oils as previously quoted. Cod Liver Oil, Norwegian, firm at \$28 50 @ \$28.00 as to quality and quantity. W. P. Sperm Oil lower at 63c. @ 64c. Mal. Olive Oil, yellow, 55c. @ 56c, green at 58c. @ 59c. Shellac D. C. has been further advanced; other grades unchanged. Camphor is weak, Japan ounce cakes at 88c. for 10 cases and 89c. for singles. Sime's in ounce cakes at 37c. Amer. Bbl. Camphor at 87c. Bismuth metal reported lower abroad. Bismuth preparations are not as yet affected. Acid, oxalic, tending higher, though 7½c. will still buy; more is generally asked. Gum chicle in better demand, 30c. now generally asked but this figure can yet be shaded. Potash, yellow prussiate is quoted at 24c. in 10 cask lots and 10½c. for singles. Japan Wax easier. Beeswax continues scarce and prices firm with indications of a further advance. Sugar lead in good demand at the recent reduction. Coriander seed lower at 7c. @ 7½c. Dutch Caraway now held at 6½c., and 5 bag lots at 6½c., but the tendency is higher. Caraway and hemp seed unchanged, but rape, German and English, are both lower. Cable advices to-day on all cloves and Sing. pepper are higher and advances may soon be looked for here. Spices generally are dull with but little change to note.

English Chemicals.

S. W. Royses & Co., of Manchester, England, issue their monthly market report, under date of November 24th. In this the spot demand for general chemicals is reported to be of a moderate description, and the inquiry for next year's delivery scarcely up to the mark. Bleaching powder continues steady in price for early delivery and forward, but the demand is not satisfactory. Caustic soda has been quiet, and the recently low prices have not stimulated inquiry. Ammonia soda is still depressed, and there has been some further cutting of prices for next year's contracts. Chlorate of potash also is somewhat easier; bicarbonate of soda is steady; soda crystals are depressed. The exports of bleaching materials and alkali are considerably heavier in last month than in October, 1893, especially to the United States, though in the ten months ended October 31st last, as compared with the corresponding period of 1893, there is in bleaching materials a decrease in weight of 7,102 tons and in value of £80,679, and in alkali a decrease in weight of 12,180 tons and in value of £274,152. In the tar products branch we may note that pitch is scarce and very firm for early delivery, and there is also more inquiry for delivery over the first half of 1895. Solvent naphtha is selling more freely; creosote is on the easy side; benzoles are quieter, though there is little change in values. In crude carbolic there is scarcely any business doing, prices being well maintained by makers, while the trade in crystals is very dull, though there is rather more inquiry for liquid carbolic for next year. Sulphate of ammonia is depressed. In other ammonia salts there is rather less activity, but values are unchanged. Acetates of lime have been drooping, but the market is now steady, and there is more inquiry, freights from America ruling low, especially for the time of the year. Acetate of soda has been selling freely at better prices, and makers are now well engaged for some time ahead. Acetates of lead are unchanged, and are

quiet. Nitrate of lead is firm, though demand is not heavy. Oxalic acid is moving better at convention figures, and there is a growing feeling that prices will be maintained if not increased. Sulphate of copper is steady on spot, and considerably higher prices are asked for delivery during the early months of 1895. Green copperas is still offering at extremely low figures, and there seems to be little hope of any early improvement. Borax is quiet, but has latterly not changed in value. There is a steady outlet for yellow prussiate of potash, but prices are slightly lower. Carbonate and caustic potash have only a moderate inquiry.

Beef Extract Advanced.

The Cudahy Pharmaceutical Company, South Omaha, Neb., with a New York branch at 57 North Moore street, issue the following circular, under date of Dec. 1:

To the Wholesale Trade: We will advance the prices of Cudahy's Rex Brand Beef Extract January 1, 1895, as follows:

2 oz. size from	\$3.85 to	\$4.00
4 oz. " "	\$7.00 to	\$7.25
8 oz. " "	\$13.00 to	\$13.50
16 oz. " "	\$24.00 to	\$25.00
5 lb. tins each from	\$8.75 to	\$9.00

No change in prices of Rex Fluid Beef.

Usual discounts. In connection herewith we take pleasure in assuring you of the continuance as well as an extension of our present energetic methods of marketing these products. We shall be pleased to receive your orders at present prices prior to January 1.

Pepsin Prices.

Golden Scale Pepsin has been reduced to \$7 a pound in pound cans and is again supplied in half pound bottles (at \$3.75) and in quarter pound bottles (at \$1.94). The ounce bottles remain unchanged at 50 cents. The resumption of the quarter and half pound sizes will be a great convenience and saving to most retailers.

Change in Prices.

Wm R. Warner & Co., manufacturing pharmaceutical chemists, Philadelphia, have issued a circular notice to the wholesale trade regarding a special offer and change in prices, as follows:

QUININE PILLS, 2 grain, \$1.25 per 1,000 net.—In lots of 25,000 to 100,000 and upwards, F. O. B. Philadelphia, New York and Chicago. If wanted in bottles of 100 pills, 2½ cts. will be added; if in bottles of 1,000, 5 cts. additional, with buyer's name for two gross and upwards. Less quantities governed by epitome prices and discounts. BROMO SODA.—The price per dozen for Bromo Soda by the gross or less is \$6.50 per dozen net. Your selling price will be \$7.50 per dozen. Trial size, \$2.50 per dozen to retail \$3. These are the ruling prices to wholesale and retail, thus allowing you \$12.00 profit on the gross for the regular size.

PIL. PERISTALTIC, formerly labeled Pil. Lapactica.—Your price to retail trade—Per bottle of 100 pills each, net 30 cts. Per bottle 100 pills each (1 gross order), 28 cts. Per bottle 500 pills each, \$1.20. Discount 20 per cent. to wholesale. To retail, net as above.

PIL. PERISTALTIC APERIENT.—Same price and discount as Pil. Peristaltic.

PIL. PERISTALTIC COMP.—To retail per bottle, 100 pills each, 60 cts net. Per bottle, 500 pills each, \$2.40. Discount 20 per cent. to wholesale.

WARNER & CO.'S LITHIA TABLETS.—\$2.25 per dozen net to retail. Discount 20 per cent. to wholesale.

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Review of the Wholesale Market.

NEW YORK, Dec. 22, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

The near approach of the holiday season has made itself felt in the drug market by a gradual decline in the business volume. Stock additions are being made with the caution always observed at this season and there is a noticeable lack of speculative inquiry. Holders are accustomed to these conditions at the approach of the holiday season, and find it inadvisable to force the distribution of any line, hence values are maintained with a noticeable steadiness.

ALCOHOL is held by the trust at \$2.38 @2.40; independent distillers continue to quote 2.35@2.40.

ANTITOXIN is now obtainable in limited quantity through Lehn & Fink, who have made an arrangement with the New York Pasteur Institute for supplies of their product.

ARNICA FLOWERS continue held and selling in moderate jobbing lots at 7½ @8½c.

BALSAM COPAIBA continues in moderate demand and among other transactions we are reported a sale of 15 packages at 33½c.

BALSAM FIR, Canada, continues in good supply with the current sales at \$2.45@2.60.

CACAO BUTTER is not inquired for to any extent, but prices in view of the limited supplies are well sustained at the quoted range.

COD LIVER OIL, Norwegian, is selling in some instances down to \$27.00 with the nominal quotation at the former figures of say \$28.00@30.00. The demand is referred to as up to the usual.

CUBEB BERRIES are in better supply and a steady moderate inquiry is experienced; of XX we are reported sales of 4,000 lbs. at 12c.

DAMIANA LEAVES, new crop, are offering in a quantity way at 9½c. Numerous jobbing transactions are reported at quotations.

CAFFEINE is easier owing to offerings from interior sources. Some sales have been effected at \$5.50@6.00 and the inside figure can in some instances be shaded for quantities.

COLOCYNTH, Trieste, is scarce and 45@48c. is now asked for the small available supply.

ERGOT is maintained in steady position notwithstanding a somewhat limited demand. The available stock is retained by a few holders who ask 21@22c. for German, and 25@27c. for Spanish.

CASSIA BUDS are maintained firmly at 19c. with numerous small sales at this quotation.

BALSAM PERU is held nominally at \$1.60@1.65 though we hear of few transactions in which \$1.55 was bid and accepted.

CASCARA SAGRADA does not vary from 4½@5c. and a moderate inquiry is experienced.

GUARANA is in better supply, and we are reported sales down to 80c.

JABORANDI LEAVES of the new crop have arrived. The quality of the stock

is exceptionally fine, and supplies are offered at 17c.; 10 bales have been sold on private terms.

MENTHOL has sold freely during the interval at our quotations. The price to arrive is considerably below the quoted range.

OPIUM continues to exhibit a lifeless appearance and little or no interest appears to be extended to the drug. A few single cases have sold during the interval and there is a moderate inquiry for jobbing parcels, though prices are still a trifle in advance of buyer's views. Single packages are held at \$2.40, while quantities in excess of this can be obtained at \$2.35, and even lower. Broken packages are offered the range of \$2.40@2.45, and powdered \$2.85@2.90.

QUININE continues in moderate steady inquiry, with numerous sales at the range of 24@24½c. for foreign according to brand and quantity. In a large way and upon a cash basis slightly better terms can be obtained.

ROSE LEAVES, red, are in improved position, the reported cornering of the stock that remains in Holland appearing to strengthen the article materially. The cost to import is now about 60c. and local holders are in most instances asking this figure.

SENNA LEAVES, Tinnivelly, are in better request and values are strengthening, though no change from our quotations of 5@18c. is reported.

DYESTUFFS. CUTCH shows no special variations. The demand continues of moderate proportions, and sales are making upon the basis of 4½@6c. as to quality.

DIVI DIVI continues very quiet. Prime grades ex-store are held at \$50.00@65.00.

GAMBIER continues in moderate jobbing inquiry, and the market is steady at 4½@4¾c. as to quality and quantity. Parcels in transit are held and selling in a limited way at 4¾c. per sail, and 4¾c. per direct steamer.

SUMAC, Sicily, is rather slow of sale, but the price shows no important variation. Spot goods held at \$60.00@62.50, and to arrive \$59.00@60.00.

CHEMICALS. ACETANILID is offering in some instances at 32c.; most holders ask 33@35c.

ACETATE OF LIME continues in fair moderate demand, with brown held at 90@95c., and gray \$1.50@1.55.

ALUM continues in moderate inquiry with current sales at \$1.65@1.70 for lump, and \$1.75@1.80 for ground.

ARSENIC, white, is in limited supply, and held at 3¾@3¾c.

BICARBONATE SODA continues in fair demand, and firm at \$2.25@2.50 for English, and \$1.75@2.50 for domestic as to brand.

BLEACHING POWDER is selling quite actively, for forward delivery and a moderate trade in spot goods is also reported, 1½@2c. is quoted for the latter.

BRIMSTONE, crude seconds, is dull at nominally \$17.00, and \$16.50@16.75 to arrive.

CHLORATE OF POTASH continues dull, though holders are not endeavoring to urge the sale below 10½c. for crystals.

CITRIC ACID continues to offer at 36½c. in barrels, and 37c. in kegs, but the demand continues exceedingly light.

NITRATE OF SODA continues inactive. Spot offers at \$2.05@2.07½, though no special interest is extended.

OXALIC ACID is maintained steadily at 7½c. with a moderate jobbing trade reported at this figure.

QUICKSILVER continues to sell fairly

in a jobbing way at 48@50c. as to holder and quantity.

ESSENTIAL OILS.

ANISE is in better supply, and values have receded from the former range to \$2.25@2.30 for jobbing parcels. Parcels to arrive are offered at a materially less figure, say down to \$1.85.

CASSIA has also reacted somewhat, and prices are a shade easier, with down to \$1.15 quoted as acceptable.

CLOVE has fluctuated in the interval, and supplies are now offered down to 52½c.

LEMON continues in fair moderate inquiry at quotations. Sandersons' brand has been reduced to \$1.30.

PEPPERMINT continues slow in sale, though steady in price. Bulk quoted at \$1.65@1.90 as to quality and holder, and H. G. H. at \$2.20@2.25.

GUMS.

ARABIC continues in good statistical position, and values are well sustained at the previous range.

ASAFETIA is maintained in steady position with a moderate jobbing trade. We quote the range at 25@40c. as to quality.

CAMPOR is dull, but steady at 37@38c. for domestic in barrels and cases. Japanese in 2 lb. cakes held at 37c.

CHICLE has advanced in the interval and holders are unwilling to execute orders below the point of 27c.

GUAIAC is jobbing fairly at the range of 12@20c. for ordinary to prime grades.

KINO is smarce and firm at \$1.60@1.75 as to quantity. The stock is closely concentrated.

SHELLAC continues in fair jobbing demand with D. C. brand held at 50@52c.

ROOTS.

GINGER, Jamaica, unbleached, is in good jobbing request and firm at 12½@14c. The stock in first hands is small and well concentrated.

GINSENG continues dull and the prices are weaker. Stock here is said to be accumulating in consequence of a lessened export demand. We quote the range at \$2.25@3.50 as to quality.

IPECAC is selling in limited quantities at the range of \$1.10@1.20 as to quality.

JALAP is quoted 25c@27c. from jobbers' hands. Some little stock held by importers is offered at 23c.

GALANGAL is held at 4½@5c. Stock at the inside price being rather inferior in quality.

ORRIS continues irregular owing to competition between holders.

SARSAPARILLA, Mexican, is not openly offered at less than 7½c.

SNAKE, Texas, is closely concentrated and held at 30c. as an inside figure.

SEEDS.

ANISE, Italian, has sold well in the interval and among other transactions we note a sale of 10 bales at 7¾c.

CANARY is without improvement; small sales are making at the range of 3¾c@3¾c. for Sicily.

CARAWAY, Dutch, is maintained firmly at 6¾c. with jobbing sales at this figure.

CORIANDER, Mogador, is selling fairly at 7c. for unbleached and 7½c. for bleached.

HEMP, Russian, is firm at 2¾c. as an inside price.

MUSTARD, CALIFORNIA, yellow, can be purchased at 3¾@3¾c.; Trieste, brown, is steady at 2¾@3c.

POPPY, blue, sells slowly at 3¾c.

STAR ANISE is firm with up to 19c. required for small lots.

QUINCE, German, is firmer with 35@40c. asked.

2 gal
256+



